Public Health Insurance Coverage for Immigrants during Pregnancy, Childhood, and Adulthood: A Discussion of Relevant Policies and Evidence

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Abstract

Context: Despite major expansions in public health insurance under Medicaid and the Children's Health Insurance Program over the last 60 years, many immigrants remain ineligible for coverage. Methods: The authors discuss the existing federal and state policies that extend public health eligibility to low-income pregnant immigrants, children, and nonelderly adults. They also conduct a literature review and summarize quasi-experimental evidence examining the impact of public health insurance eligibility expansions on insurance coverage, health care use, and health outcomes among immigrants.

Findings: Public health insurance eligibility for immigrants varies widely across states because of the implementation of different federal and state policy options. Previous studies on expanded eligibility identified positive effects on insurance coverage and health care utilization among pregnant and child immigrants as well as some evidence indicating improved health outcomes. Additional research is required to understand the longer-term impacts of expanded coverage and to examine impacts of recent state expansions for adults.

Conclusions: A complicated patchwork of federal and state policies leads to major differences in immigrant access to publicly funded insurance coverage across states and population groups. These policies likely have important implications for immigrant access to health care and health.

Keywords health insurance, immigrants, Medicaid, CHIP

Public health insurance eligibility for pregnant people, children, and nonelderly adults has grown significantly over the last 60 years under Medicaid and the Children's Health Insurance Program (CHIP). However, many immigrants who meet the financial requirements for eligibility remain ineligible for insurance coverage under these programs. Under federal rules to be eligible for coverage through Medicaid or CHIP, immigrants must either be US citizens or meet the definition of a "qualified" noncitizen and hold this status for at least 5 years; this is known as the "5-year bar." Lawful permanent residents (i.e., "green card" holders) and certain other groups are considered qualified noncitizens. Some qualified noncitizens, such as refugees and asylees, are exempt from the 5-year bar (CMS 2022). The definition of a qualified noncitizen excludes undocumented immigrants and other noncitizens who have permission to live or work in the United States but do not meet the qualified definition (e.g., a nonimmigrant visa holder). These individuals are ineligible for coverage, along with nonexempt qualified noncitizens during the 5-year bar, unless there are state actions to provide coverage to these groups.

A complex maze of other federal and state policies affects access to Medicaid or other publicly funded insurance coverage for these excluded immigrants. Federal options allow states to extend Medicaid or CHIP eligibility to certain excluded immigrants, but the populations and services covered are limited. For these reasons, some states use state funding to fill in remaining gaps in coverage. In all states, some immigrants who do not qualify for Medicaid are eligible for federally subsidized private health insurance through the Affordable Care Act (ACA) Marketplace. Even with these federal and state options, gaps in eligibility for publicly funded insurance remain, particularly for undocumented immigrants.

The complexity of eligibility rules for immigrants and variation across states reflect the lack of public consensus on whether the government should pay for the health insurance coverage of noncitizens. Arguments against the provision of government-funded health care for noncitizens, which are often grounded in perceptions and beliefs rather than evidence, include concerns about the costs of providing coverage or the potential strain on the health care system as well as any incentives it may create for unlawful immigration or interstate migration of noncitizens (Fabi and Zahn 2022). Arguments for coverage of this population often cite humanitarian or ethical motivations, the potential economic benefits of providing coverage, providing care to benefit the health of future citizens (e.g., prenatal care), and the possibility that increasing access to health care can save costs through prevention and earlier detection of disease, and reduced disease transmission (Fabi and Zahn 2022).

The complete list of qualified noncitizens is available at https://www.healthcare.gov/immigrants/lawfully-present-immigrants.

Better understanding the impact of extending public coverage to different immigrant groups can provide useful evidence to states with proposed extensions. In particular, this evidence addresses important lawmaker considerations such as expected uptake among the eligible population, and relatedly, projected spending and health benefits. While there is a large body of evidence documenting the effects of Medicaid more broadly, there are many reasons to expect that the effects may differ for noncitizens. For example, noncitizen adults are less likely to have access to employer-sponsored health insurance, and to be connected to the health care system, than their US-born counterparts (Pillai et al. 2023). This suggests that expanded Medicaid may be less likely to "crowd out" other forms of insurance coverage for this population and may lead to larger benefits in terms of access to care, health, and financial well-being.

On the other hand, noncitizens face other unique barriers to accessing insurance coverage and health care. For instance, informational, language, and documentation barriers related to the application process may reduce immigrants' Medicaid enrollment (Aizer 2007; Sommers 2010), and incomplete knowledge of covered health care services could limit their service use (Funkhouser et al. 2021). Fear of deportation, beliefs that public benefit use may affect eligibility for citizenship (Sun-Hee Park et al. 2000), changes to the "public charge" rule (Wang et al. 2022), and the emergence of other anti-immigrant policies (Watson 2014) may also deter eligible immigrants from enrolling in public insurance or using health care. Finally, immigrants may encounter additional challenges to navigating the health care system and receiving quality care related to language, culture, and discrimination (Pillai et al. 2023).

This article will first provide a summary of the different federal and state policies that affect immigrant eligibility in Medicaid/CHIP. We will next review the evidence on the effects of changes in public health insurance eligibility for the following nondisabled, nonelderly groups: pregnant individuals, children, and adults. We conducted a search for studies on both Google Scholar and PubMed, using search phrases related to public health insurance and the immigrant population, in addition to examining studies included in the bibliographies of any articles found. Our review focuses on publicly available studies that use quasi-experimental research designs to estimate the causal effects of eligibility policy changes. It is worth noting that changes in eligibility policies may be related to other factors that influence the outcomes being studied. For this reason, we required that all studies not only examine changes in outcomes before and after a policy change but also include at least one comparison group not affected by the

policy change. We also required the use of regression analysis to control for other potential factors unrelated to the policy change that may affect outcomes. After summarizing the existing evidence for each population group, we provide a discussion of important areas for future research.

Federal and State Policies Regarding Public Insurance Eligibility

Table 1 provides a summary depicting the different eligibility pathways to publicly funded insurance coverage for low-income immigrants. Eligibility for traditional Medicaid/CHIP coverage is restricted to US citizens and qualified noncitizens who have met the 5-year bar, if applicable. Not included in table 1 is the fact that all states are required to cover the treatment of emergency medical conditions, including labor and delivery services, for immigrants who are excluded from Medicaid because of their immigration status.

Two federally funded options available to states expand eligibility to certain excluded immigrants. First, the Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA) allows states to offer Medicaid and CHIP coverage to low-income pregnant immigrants and children who are "lawfully residing" in the United States. This includes qualified noncitizens within the 5-year bar as well as other individuals with permission to live and work in the United States (Mann 2010). As of January 2023, 26 states cover CHIPRA-eligible pregnant immigrants, and 35 states cover CHIPRA-eligible children under their state Medicaid programs (Brooks et al. 2023).

Undocumented immigrants remain ineligible for Medicaid and CHIP under the CHIPRA state option. In April 2023, the Biden administration proposed to add Deferred Action for Childhood Arrivals (DACA) recipients, a subgroup of undocumented immigrants who entered the United States as children before 2007, to the group considered lawfully residing for the CHIPRA option (Park, Makhlouf, and Fabi 2023). In May 2024, the Biden administration announced that they are still considering whether to allow access to CHIP or Medicaid for this population (CMS 2024).

Second, the CHIP Unborn Child option allows states to provide CHIP-funded coverage to low-income pregnant individuals regardless of their immigration status, thereby including undocumented immigrants and others not meeting the qualified noncitizen definition. However, because the CHIP Unborn Child option restricts benefits to only pregnancy-related services that benefit the fetus (e.g., prenatal care, labor and delivery), it

Table 1 Eligibility for Publicly Funded Insurance Coverage for Low-Income Immigrants

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				Traditional Medicaid/ CHIP	Traditional CHIPRA option CHIP unborn child Medicaid/ (pregnant persons option (pregnant CHIP and/or children)* persons)**	CHIP unborn child option (pregnant persons)**	State-funded Marketplace programs*** and subsidies	Marketplace and subsidies
Citizens	Citizens			Yes			ı	
Noncitizens	Lawfully	Qualified	Qualified For 5+ years Yes	Yes				
	present		or exempt					
			<5 years	No	Yes	Yes	Varies	Yes
		Other		No	Yes	Yes	Varies	Yes
	Undocumented Non-DACA	Non-DAC/	4	No	No	Yes	Varies	No
		DACA		No	No	Yes	Varies	Yes (starting November 2024)

Notes: CHIP=Children's Health Insurance Program; CHIPRA=Children's Health Insurance Program Reauthorization Act; DACA=Deferred Action for Childhood Arrivals.

* Eligibility for "lawfully residing" immigrants; similar definition to the Affordable Care Act's "lawfully present."

^{**} May not include postpartum services or care not related to pregnancy.
*** Eligible population and services included at discretion of the state.

does not necessarily include the postpartum services available in traditional Medicaid (Mann 2009). Twenty states have adopted the CHIP Unborn option as of January 2023 (Brooks et al. 2023).

States sometimes use their funding to cover immigrants left out of these two federal options, mainly children who are not lawfully present and non-pregnant adults who do not meet the immigration status requirements for traditional Medicaid. Currently, 12 states use their own funding to provide coverage to immigrant children, and 11 states use state-only funds to provide coverage to immigrant parents or other adults. While some of these states limit coverage to certain immigrant groups or services, a growing number are extending full benefits to *all* low-income children or adults, regardless of immigration status (Brooks et al. 2023).

Finally, immigrants meeting the definition of "lawfully present," which is similar to the definition of lawfully residing used in Medicaid/CHIP (NILC 2024), may purchase private health insurance on the Marketplace. They are also eligible for federal premium and cost-sharing assistance for this coverage. The American Rescue Plan Act of 2021 increased the value of these federal subsidies and expanded eligibility beyond 400% of the federal poverty level, which was the original cap under the ACA. The Inflation Reduction Act extended these changes through 2025. Notably, this federally subsidized coverage is available to qualified immigrants within the 5-year bar who are not yet eligible for Medicaid, even if their income is below the poverty line, which differs from rules for US citizens (CMS 2022). Undocumented immigrants are ineligible for these subsidies or even to purchase insurance on the Marketplace, although the Biden administration recently extended eligibility for Marketplace plans and subsidies to DACA recipients starting in November 2024 (CMS 2024). Two states have taken steps to provide state-funded subsidies to immigrants who do not qualify for federal subsidies to purchase a Marketplace plan or other private coverage (KFF 2023).

Evidence on Pregnancy Public Health Insurance Eligibility for Immigrants

Some of the earliest evidence on the impact of pregnancy Medicaid eligibility for immigrants focused on the introduction of the 5-year bar for qualified noncitizens under the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA). This new restriction applied to federal Medicaid funding only, and some states continued to provide coverage to qualified noncitizens within the 5-year bar using state funds.

Two studies compared changes in health insurance coverage, health care utilization, and birth outcomes among immigrants in states with and without these state-funded programs. Using national data, Royer (2005) found a marginally significant decrease in prenatal care use among Hispanic immigrant mothers with low education levels in states without state-funded programs when the PRWORA restriction went into place. Using administrative data from a large state without a state-funded program (Texas), the same study documented a sizable decline in Medicaid enrollment among noncitizens and corresponding decreases in the use and early initiation of prenatal care, as well as the number of prenatal visits, among low-education Hispanic women. In contrast, Joyce and coauthors (2001) found no change in early initiation of prenatal care among immigrant mothers from Latin America in Texas after the PRWORA restriction. Neither study found a change in birth outcomes, but Royer found some evidence of increased labor complications among immigrant women with health risk factors in Texas following the PRWORA restriction. In addition, Joyce et al. found increased uninsurance among immigrant Mexican women compared to US-born Mexican women in California, which had a state-funded program, suggesting potential chilling effects from the PRWORA policy change.

A third study examined relative changes in mortality among infants of Mexican immigrants following PRWORA in states with and without state-funded programs to cover immigrants within the 5-year bar. Cho (2011) found an increase in infant mortality among the children of Mexican immigrants after PRWORA in states without state-funded programs.

More recent studies have examined the impact of newer federal policy options to expand coverage, which largely replaced the state-funded PRWORA-era programs. Drewry and collaborators (2015) focused their analyses on immigrant mothers from Mexico and Central/South America and examined changes in pregnancy-related outcomes in states with early adoption of CHIP Unborn. Wherry and collaborators (2017) used state policy changes over a longer time period to estimate the effects of CHIP Unborn, CHIPRA, and state-funded coverage options among all immigrant mothers. Together, the two studies found evidence of improved prenatal care use among high-risk subgroups following state implementation of these polices. Neither study, however, detected significant changes in infant health under the state policies they studied.

A common limitation of these studies and the earlier literature examining the PRWORA restriction is the lack of individual-level information on citizenship, length of time in the United States, or immigration status in

the data sources available with measures of health care utilization and health outcomes. Therefore, researchers often need to estimate effects among populations that include individuals not affected by the policies being studied (e.g., naturalized citizens and qualified noncitizens with this status for more than 5 years). This is expected to attenuate estimates of policy impact and limit the ability to detect effects.

Several recent studies have focused on state-specific policy changes for pregnant immigrants using state administrative data that allows them to better identify the targeted population. In one of these studies, Atkins, Held, and Lindley (2018) examined a temporary discontinuation of pregnancy Medicaid eligibility for undocumented immigrants in Nebraska. Using the absence of the mother's social security number on the birth record to infer undocumented status, the authors examined changes in prenatal care utilization among undocumented women in Nebraska associated with this policy change. They found undocumented immigrants were less likely to receive adequate prenatal care and received approximately one less prenatal visit when the policy went into effect.

Another set of studies focused on the expansion of prenatal care to all immigrants in Oregon using the CHIPRA and CHIP Unborn policy options, a change that was rolled out across counties between 2008 and 2013. These studies primarily relied on Medicaid claims data, allowing the authors to identify affected immigrants, and examined changes in outcomes after implementation. The authors found reductions in rates of extremely low birth weight (fewer than 1,000 grams) and infant mortality among the children of immigrants who gained eligibility as well as increased recommended pediatric care during infancy (Swartz et al. 2017). These studies also documented improved prenatal care utilization, better prenatal screening and detection of pregnancy complications, and increased use of contraception following delivery under the prenatal expansion (Rodriguez et al. 2021, 2022; Swartz et al. 2017, 2019). There was no detectable effect on maternal health as measured by severe maternal morbidity (Swartz et al. 2019). However, many of these results are difficult to interpret because the outcome measures rely on the presence of Medicaid claims, and the comparison groups used do not have Medicaid coverage or associated claims before or following delivery. When the researchers linked the Medicaid claims to birth certificate data to avoid this limitation, they were unable to detect changes in birth certificate measures of short interpregnancy intervals or newborn health (Rodriguez et al. 2021, 2022).

Although Oregon's prenatal expansion did not include coverage for postpartum care, the state more recently expanded eligibility for 60 days of

postpartum care to all immigrants. Evaluations of this policy change found that it led to increases in Medicaid-funded postpartum visits, recommended screenings and care, and postpartum contraception for eligible immigrants within this 60-day period (Rodriguez et al. 2021, 2023). These analyses, however, also relied on Medicaid claims and did not examine changes in overall utilization of these services.

Finally, two recent studies examined the longer-term effects of expanded prenatal coverage for immigrants on their children. Hwang (2023) examined the effects of the CHIP Unborn option on the health of young children of noncitizen mothers with low education levels. The study found no effects on health at birth or early ages, but they documented improved parental-reported health at ages 4–6. Meanwhile, Miller, Wherry, and Aldana (2024) examined longer-term effects for the children of immigrants under a California-funded expansion in Medicaid pregnancy eligibility to immigrants regardless of immigration status. The authors found evidence of improved birth outcomes for the infants of immigrant women under the policy change as well as better educational outcomes and decreased use of public support programs for the infants when they reached young adult-hood. They calculated that, in the long run, the government would recoup the initial cost of the Medicaid benefit through reduced public support payments for these individuals.

To our knowledge, only two studies have considered the potential effects of public eligibility on other types of outcomes. Miller, Wherry, and Aldana (2024) documented an increase in live births among immigrant mothers after the California Medicaid prenatal expansion. The authors were unable to determine whether the increase in births was the result of better access to medical care during pregnancy, and thereby fewer miscarriages, or if it reflected changes in desired fertility because of the lower costs of pregnancy. Meanwhile, Yasenov and coauthors (2020) examined whether extended public eligibility might attract immigrants to states with these policies. They found no evidence that noncitizen women within the 5-year bar relocated in response to state adoption of the CHIPRA or CHIP Unborn options. Additional details on all studies are in appendix table A.

Summary of Evidence on Pregnancy—and Future Directions

The existing evidence clearly indicates that expanded pregnancy eligibility for otherwise restricted immigrant groups leads to increased prenatal care use. The evidence regarding whether this translates into better pregnancy or birth outcomes is more mixed, but at least three studies document positive

effects on newborn or infant health. In addition, emerging evidence indicates that there can be important longer-term benefits for the children of immigrants who gain eligibility, even in the case when short-term effects on birth outcomes are not detected.

The evidence to date indicates that more generous state eligibility policies for pregnant immigrants do not lead to greater migration to these states. Restrictive policies, however, may have a chilling effect by reducing Medicaid participation among eligible immigrants. We were unable to find any studies that considered potential spillover effects (positive or negative) to nonimmigrant populations. One study documented an increase in births to immigrant mothers under pregnancy Medicaid. Further work is needed to understand whether this is a behavioral effect, or the result of healthier pregnancies under expanded Medicaid.

Along these lines, little is known regarding the effects of pregnancy eligibility on maternal health and well-being. The limited earlier research indicates that expanded prenatal eligibility does increase the receipt of Medicaid-funded prenatal screening and detection of pregnancy complications, as well as postpartum contraception, among targeted immigrants. However, further research is needed to determine whether these patterns lead to overall changes in services received, or whether they are accompanied by declines in other publicly funded care for this population, such as care accessed in public clinics or safety net health care systems. In addition, not all expansions in pregnancy coverage for immigrants include postpartum care, and information on what types of postpartum services are included under state programs, if any, can be difficult to find. Recently compiled information on 20 states with large immigrant populations found that 13 states excluded at least some immigrant groups from postpartum coverage on the basis of their immigration status (Steenland et al. 2023). More work is needed to examine the effects of postpartum coverage on both health care utilization and maternal health.

In the existing literature, there is often a trade-off in terms of the information available in a data source to identify the population of interest and to measure the outcomes of interest. For example, Medicaid claims data may allow researchers to identify exactly who is affected by the policy, but it is not ideal for measuring most outcomes because researchers only observe health care paid for by Medicaid. Birth certificate and survey data provide outcome measures for everyone but do not generally allow researchers to perfectly identify the population affected, which likely attenuates findings. Strategies to overcome this limitation, such as linking survey/birth certificate data to Medicaid data, could help overcome these difficulties and lead to stronger estimates of policy impact.

Looking forward, the Medicaid policy landscape is currently undergoing major changes as part of national efforts to improve maternal health. Recently, many states have implemented a new federally funded option to extend postpartum coverage under pregnancy Medicaid from 60 days to 12 months postpartum, but only certain immigrants are eligible. Existing evidence indicates that there are already large differences in postpartum insurance between citizens and noncitizens (Johnston et al. 2023). Leaving undocumented immigrants, and immigrants subject to the 5-year bar, out of this major insurance expansion could leave postpartum noncitizens even further behind their citizen counterparts and will be an important topic for future study.

Evidence on Public Health Insurance Eligibility for Children

Many studies examining public health insurance eligibility for children focus on children of immigrant families, of whom only a small share are immigrants themselves. Nonetheless, these studies find patterns of interest for these children in response to income eligibility expansions or restrictions that target immigrants. In one of the earliest studies, Currie (2000) examined the effects of Medicaid expansions for children between 1989 and 1992 separately for children with and without immigrant parents. The author found that, relative to children with US-born parents, children of immigrant parents were less likely to gain Medicaid coverage under expanded eligibility but had a greater increase in overall insurance coverage, suggesting less availability of other sources of coverage for this population. Children of immigrants also saw a greater increase in annual doctor visits but no difference in hospitalization, relative to children with US-born parents.

The next series of studies focused on the effects of the 5-year bar for qualified noncitizens introduced under PRWORA on the health insurance coverage of children in immigrant families. Borjas (2003) compared changes in insurance coverage for the children of noncitizen and naturalized citizen parents following PRWORA in states with and without policies to retain eligibility for newly restricted immigrants. The study found a large relative reduction in Medicaid coverage among children of noncitizen parents in states not continuing eligibility. This loss of Medicaid coverage, however, was offset by a slightly larger increase in

employer-sponsored coverage, leading to no overall change in insurance status. There were no changes in coverage observed for the children of naturalized citizen parents.

Meanwhile, Kaushal and Kaestner (2005) focused on the children of unmarried immigrant women with low educational attainment and examined changes in insurance coverage after the restrictions went into effect. Unlike earlier work, the authors considered whether the child was an immigrant. The authors found large declines in Medicaid coverage among both immigrant and US-born children of immigrant parents, suggesting that the policy had a chilling effect on US-born children whose Medicaid eligibility did not change with PRWORA. These declines were accompanied by similarly sized increases in uninsurance. Later research by Lurie (2008) using data with more detailed information on immigration status confirmed these findings.

The next two studies focused on expansions in public health insurance eligibility for higher-income children that occurred in the late 1990s and 2000s. Buchmueller, Lo Sasso, and Wong (2007) studied expanded eligibility under CHIP from 1996 to 2000 and effects on insurance coverage separately for low-income children with and without immigrant parents. They found similar rates of enrollment and decreased uninsurance among children in the two types of families, with perhaps slightly larger effects among children of immigrant parents.

Bronchetti (2014) extended this work using a longer time period and including measures of health care utilization and health. The author documented larger increases in Medicaid and overall insurance coverage for children of immigrant parents than for children of US-born parents, consistent with previous findings. These changes in coverage were accompanied by increased access to and use of ambulatory care and a reduction in ER visits for low-income children with immigrant parents. The study also found evidence suggestive of improved child health as a result, in the form of better health status and reduced likelihood of an asthma attack.

More recent studies have focused on state CHIPRA policy adoption. Saloner, Koyawala, and Kenney (2014) compared changes in insurance and access to care among low-income immigrant children in states that did and did not adopt CHIPRA in 2010. They found a 15-percentage point increase in overall insurance coverage and decrease in time spent uninsured among immigrant children under CHIPRA as well as a decrease in unmet health care needs. The authors found no indirect effects of the policy on US-born children of immigrant parents. Mahmud (2016) documented an 8-percentage point increase in insurance coverage under the 2010 CHIPRA

adoptions, and found no evidence of labor supply responses among the mothers of immigrant children. A more recent study by Chu, Roby, and Boudreaux (2022) builds on this earlier work by including more recent state CHIPRA adoptions and found a 6-percentage point increase in insurance coverage. The authors were unable to detect significant changes in measures of access to and use of health care, nor did they detect significant changes in health outcomes. The direction of the estimates, however, tended to suggest improvements in states with CHIPRA adoption. None of these studies found evidence of a change in private health insurance coverage under the policy. Finally, Yasenov and coauthors (2020) found no evidence that state CHIPRA adoption led to greater in-state migration among noncitizen families with children.

Only one study has examined expanded public eligibility for undocumented children. Lipton, Nguyen, and Schiaffino (2021) measured changes in the insurance coverage of low-income noncitizen children following California's expansion of public insurance to all immigrant children. The authors found a 12-percentage point increase in Medicaid and CHIP coverage for this population, accompanied by a 9-percentage point increase in overall insurance coverage and no change in private coverage. Additional details on all studies are in appendix table B.

Summary of Evidence for Children—and Future Directions

Several studies have examined whether the effects of general expansions in public health insurance eligibility differ between children with and without an immigrant parent. Although these studies have slightly different findings regarding relative rates of enrollment in public insurance, all of these studies suggest that eligibility expansions lead to larger declines in uninsurance for children in immigrant families. Furthermore, the changes in insurance lead to increases in access to and use of ambulatory care. Importantly, one study provides evidence suggestive of health improvement for these children and documents a significant reduction in ER visits.

In addition, a number of studies have focused on public insurance eligibility for qualified immigrant children within the 5-year bar. Studies of the PRWORA restrictions indicate increased uninsurance among immigrant children under this policy as well as among US-born children of immigrant parents who were not directly affected by the policy change (i.e., chilling effects). The change in insurance status, however, was smaller in states that used their own funding to continue to provide eligibility to this restricted group. None of the studies examining the PRWORA restriction

examine whether these changes in insurance affected health care utilization or health outcomes for children in immigrant families.

The lessons from CHIPRA adoption regarding insurance coverage are similar. The authors find meaningful increases in overall insurance coverage among lower-income immigrant children in states with this policy option (estimates range from 6 to 15 percentage points), with no evidence that private coverage was crowded out. Findings regarding whether this insurance increase translates into better access to care are mixed, and the one study that examined health outcomes was unable to detect significant effects. None of the studies on CHIPRA adoption show evidence of indirect effects for US-born children of immigrants. Two studies found no evidence of behavioral effects from this policy on parental migration or labor supply.

An important area for future consideration is the study of any longerterm effects of expanded Medicaid eligibility for immigrant children. A growing body of evidence generally finds better health and educational outcomes for children under income expansions in Medicaid/CHIP coverage (Wherry, Kenney, and Sommers 2016). Given the unique barriers faced by immigrant families in the United States, there may be different long-term effects of childhood Medicaid eligibility for immigrant children, which would be beneficial to document.

Finally, there is very limited evidence on the impacts of public health insurance eligibility for undocumented immigrant children specifically. One study of a state-funded program documented a 9-percentage point decrease in uninsurance among low-income noncitizen children. The total number of state programs covering this population reached 12 in 2023, so evaluation of the effects of these state policy changes on health care utilization and health outcomes, as well as their associated costs, will be crucial for state or federal policy makers considering similar eligibility changes.

Evidence on Public Health Insurance Eligibility for Adults

Studies of public health insurance eligibility for immigrant adults have primarily focused on the effects of the 5-year bar for qualified noncitizens introduced under PRWORA. Borjas (2003) compared changes in coverage among nonelderly individuals in immigrant families after PRWORA in states with and without policies to continue eligibility for newly restricted immigrants. The study documented a relative decrease in Medicaid coverage in states without these policies, which was more than offset by an increase in employer-sponsored insurance coverage. The author showed some evidence of increased labor supply among men in these families, as an explanation for the rise in employer-sponsored coverage.

Meanwhile, Kaushal and Kaestner (2005) focused their analysis on unmarried immigrant women with low levels of educational attainment. The study found reductions in Medicaid and overall insurance coverage following the PRWORA restriction and no evidence of increased employersponsored coverage. The study found similar results for immigrant women who arrived in the United States before PRWORA (and therefore remained eligible for Medicaid) and those who arrived after PRWORA. In contrast to Borjas, the study also found similar effects of PRWORA for immigrants who lived in states with and without state-funded programs to continue eligibility for the newly restricted immigrants. The authors attributed these last two findings to likely chilling effects of PRWORA affecting Medicaid enrollment among eligible immigrants. The presence of chilling effects is further supported by another study (Kandula et al. 2004). Finally, Kaushal (2005) examined whether state policies to continue immigrant eligibility after PRWORA affected the location decisions of newly arriving immigrants and found no effect.

More recently, three studies examined the impacts of the ACA Medicaid expansions on immigrant adults. First, Stimpson and Wilson (2018) examined effects on uninsurance separately by whether low-income adults were US-born citizens, naturalized citizens, or noncitizens. The authors found smaller declines in uninsurance among noncitizens and naturalized citizens, although the latter estimate is imprecise, than among USborn citizens. Next, Kaushal and Muchomba (2023) estimated the effects of the ACA expansions on insurance coverage, health care utilization, and expenditures separately for immigrants and nonimmigrants. The authors found much lower baseline rates of insurance coverage among the immigrant group (46% compared to 70% among nonimmigrants) but similar changes in insurance coverage after the ACA expansions for both groups (7-percentage-point increases). In addition, the authors found a larger increase in health care expenditures and greater evidence of changes in utilization for nonimmigrants, suggesting that there may be additional barriers to accessing care beyond insurance status for the immigrant population. Third, Guo and Zou (2022) documented increased Medicaid coverage and decreased uninsurance among noncitizens in expansion states, but no effect on interstate migration for this population.

An additional study examined whether the ACA Medicaid expansions exacerbated existing disparities in health care utilization between immigrants and nonimmigrants. Janevic and coauthors (2022) hypothesized that

increased access to nonpregnancy Medicaid under the ACA expansions would increase early initiation of prenatal care among US-born women, since prepregnancy health insurance coverage is a predictor of early prenatal care use, but not among immigrant women, given the restrictive eligibility criteria for the ACA expansions. They found evidence indicating this occurred among Hispanic women, increasing the immigrant versus US-born disparity in early prenatal care for this group.

Finally, one study examined changes in health insurance coverage under the ACA among low-income documented immigrants who recently arrived in the United States. García-Pérez (2019) estimated effects separately for states with and without programs to cover immigrants within the 5-year bar and also examined the interaction effects of Medicaid expansion and the Marketplace. As a result of the many factors considered, it can be difficult to interpret the results. However, the estimates appear to suggest that Medicaid expansion may have replaced (i.e., crowded out) coverage received through the Marketplace for some immigrants. Additional details on all studies are in appendix table C.

Summary of Evidence for Adults—and Future Directions

We know the least about the effects of public health insurance eligibility for nonpregnant immigrant adults. Medicaid coverage of nondisabled adults without children began only 10 years ago with the start of the ACA. Additionally, there are no policies that allow for the use of federal funding to extend Medicaid eligibility to qualified noncitizen adults within the 5-year bar, or to other lawfully present immigrants. While some states have extended public eligibility to these immigrant groups using state funds, these programs are less common than those for pregnant women and children, and many are recent.

One area of existing research focused on the introduction of the 5-year bar on Medicaid for qualified noncitizen adults under PRWORA. While the findings were mixed, it seems likely that Medicaid eligibility for this group leads to greater Medicaid coverage and lower rates of uninsurance, drawing on the larger body of evidence from eligibility for pregnant immigrants and children. In addition, these studies found evidence of chilling effects among nontargeted immigrant adults, similar to the earlier described pattern among children in immigrant families.

Additional evidence from the ACA indicates that low-income immigrant adults benefit from expanded Medicaid eligibility, but perhaps to a lesser extent than nonimmigrants. Three studies document improved insurance

coverage among immigrant adults under the expansions. However, these studies also indicate that there may be more barriers to taking up Medicaid coverage and accessing care once enrolled for this population, as compared to US-born adults. One study suggests that, given the eligibility exclusions based on immigration status, the ACA Medicaid expansions may have exacerbated existing disparities in health care between immigrant and non-immigrant adults.

Studies of state Medicaid expansions do not provide evidence in support of a "welfare magnet" hypothesis, that is, the idea that immigrant migration decisions are based on the generosity of Medicaid benefits. One study provides some evidence of an increase in labor supply among immigrants in response to restricted eligibility, but the pattern was observed among men whose families were likely ineligible for Medicaid regardless of their immigration status during this study period; more current research on this question is needed. We were also unable to find any studies that considered potential spillover effects (positive or negative) to nonimmigrant populations.

Moving forward, there exists very little information regarding adult immigrant participation in the ACA Marketplace. One study suggests that it may be an important source of coverage for certain low-income documented immigrants. More research in this area is needed to understand the extent to which the Marketplace expands access to insurance for lawfully present immigrants who are ineligible for Medicaid, and whether it reduces the coverage gap for low-income immigrant adults in states that have opted out of the ACA Medicaid expansions.

Similarly, careful evaluation of the emerging number of state-funded programs designed to extend eligibility to all low-income adults regardless of immigration status will be important in the future. To our knowledge, there have yet to be any quasi-experimental studies of these programs. Information on the benefits and costs of expanded coverage is needed to help assess the value of these programs.

Finally, we have yet to see any evidence on the relationship between the health of nonpregnant adult immigrants and public health insurance eligibility. Evidence from a recent randomized, controlled trial for a pilot connecting undocumented immigrants to primary care in the safety net health care system in New York City indicates that increased access to care for this population can reduce the need for emergency care and improve health outcomes (Sabety et al. 2023). Additional research is needed to understand whether Medicaid is successful in achieving similar outcomes for this population and other immigrant groups as well as the associated net costs.

Conclusion

Only immigrants who are US citizens or qualified noncitizens, and have held this status for at least 5 years, are eligible for Medicaid coverage. Federal policy allows states to extend Medicaid and CHIP eligibility to pregnant women and certain children not meeting this requirement, but not to nonpregnant adults. Some states have implemented state-funded programs to help fill in these gaps in eligibility. Meanwhile, the ACA enabled lawfully present immigrants to purchase federally subsidized insurance coverage on the Marketplace. Yet in the majority of cases, low-income immigrants without a lawful presence remain ineligible for publicly funded insurance coverage.

Some proposed changes at the federal level may redefine which immigrants are eligible for publicly funded insurance coverage. The Biden administration has recently expanded the definition of "lawfully present" to include DACA recipients in the context of the ACA Marketplace and access to subsidized plans, and the administration is still weighing doing the same for Medicaid/CHIP in states with a CHIPRA option for pregnant persons and/or children (CMS 2024). In addition, legislative proposals in Congress, such as the LIFT the BAR and HEAL Acts, aim to remove the 5year waiting period for Medicaid and further broaden immigrant eligibility.

Our review of the evidence indicates that expanded public insurance for noncitizens leads to meaningful increases in insurance coverage among immigrants. Yet the degree to which removal of current eligibility restrictions for public insurance will reduce existing disparities in insurance coverage remains unclear, and it is important to better understand this dynamic.

There is also the question of whether increased insurance coverage for this population translates into meaningful changes in access to highquality health care. There is strong evidence that expanded pregnancy Medicaid improves prenatal care use for this population, but the evidence base regarding the effects of expanded coverage for children and adults is underdeveloped. Still, what evidence there is suggests that there are likely important barriers to accessing care beyond insurance status. Further attention to this question, as well as consideration of how health care services accessed through Medicaid may or may not differ from care received by uninsured individuals through the US public health safety net, is needed.

New research is also needed to examine the health effects of expanded Medicaid for immigrants. For instance, the evidence to date indicates that removing immigrant eligibility restrictions for pregnancy Medicaid leads to improved health for the next generation, but very little is known about the implications for maternal health. In addition, there is some evidence that expanded Medicaid eligibility for immigrant children may result in better health, but more research is needed to trace out the longer-term effects for these children. Lastly, there has been no study to date of the potential health effects of expanded Medicaid for nonpregnant immigrant adults. This is an important area for future research given the growing number of state programs expanding coverage for this population group. Information on the benefits and costs associated with these programs will aid the public and policy makers considering similar changes. Future research should also consider when the evidence on Medicaid writ large is likely applicable to immigrants and when it is not.

Finally, this review of the evidence has focused on overall program impacts related to the health insurance coverage, health care utilization, and health of pregnant immigrants, children, and adults. There is much sparser evidence available on other program impacts. Other considerations for researchers and policy makers are potential heterogeneous effects among immigrants based on their race and ethnicity or national origin, spillover effects for mixed-status families or others in the community, and any direct benefits or costs to Medicaid policy not captured in these outcomes, such as the financial or nonhealth benefits to families or potential behavioral responses to expanded eligibility.

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References

- Aizer, Anna. 2007. "Public Health Insurance, Program Take-Up, and Child Health." Review of Economics and Statistics 89, no. 3: 400-415.
- Atkins, Danielle N., Mary L. Held, and Lisa C. Lindley. 2018. "The Impact of Expanded Health Insurance Coverage for Unauthorized Pregnant Women on Prenatal Care Utilization." Public Health Nursing 35, no. 6: 459–65.
- Borjas, George J. 2003. "Welfare Reform, Labor Supply, and Health Insurance in the Immigrant Population." Journal of Health Economics 22, no. 6: 933-58.
- Bronchetti, Erin Todd. 2014. "Public Insurance Expansions and the Health of Immigrant and Native Children." Journal of Public Economics 120: 205–19.
- Brooks, Tricia, Allexa Gardner, Peyton Yee, Jennifer Tolbert, Bradley Corallo, Sophia Moreno, and Meghana Ammula. 2023. "Medicaid and CHIP Eligibility, Enrollment, and Renewal Policies as States Prepare for the Unwinding of the Pandemic-Era Continuous Enrollment Provision." April 4. https://www.kff.org /medicaid/report/medicaid-and-chip-eligibility-enrollment-and-renewal-policies -as-states-prepare-for-the-unwinding-of-the-pandemic-era-continuous-enrollment -provision/.
- Buchmueller, Thomas C., Anthony T. Lo Sasso, and Kathleen N. Wong. 2007. "How Did SCHIP Affect the Insurance Coverage of Immigrant Children?" National Bureau of Economic Research, Working Paper 13261, July. https://www.nber.org /system/files/working_papers/w13261/w13261.pdf.
- Cho, Rosa M. 2011. "Effects of Welfare Reform Policies on Mexican Immigrants' Infant Mortality Rates." Social Science Research 40, no. 2: 641-53.
- Chu, Jun, Dylan H. Roby, and Michel H. Boudreaux. 2022. "Effects of the Children's Health Insurance Reauthorization Act on Immigrant Children's Healthcare Access." *Health Services Research* 57, suppl. 2: 315–25.

- CMS (Centers for Medicare and Medicaid Services). 2022. "Immigrant Eligibility for Marketplace and Medicaid and CHIP Coverage." https://www.cms.gov/marketplace/technical-assistance-resources/immigrant-eligibility-marketplace-medicaid-chip.pdf (accessed April 14, 2023).
- CMS (Centers for Medicare and Medicaid Services). 2024. "Final Rule, Clarifying the Eligibility of Deferred Action for Childhood Arrivals (DACA) Recipients and Certain Other Noncitizens for a Qualified Health Plan through an Exchange, Advance Payments of the Premium Tax Credit, Cost-Sharing Reductions, and a Basic Health Program." *Federal Register* 89, no. 90: 39392–39437.
- Currie, Janet. 2000. "Do Children of Immigrants Make Differential Use of Public Health Insurance?" In *Issues in the Economics of Immigration*, edited by George J. Borjas, 271–308. Chicago: University of Chicago Press.
- Drewry, Jonathan, Bisakha Sen, Martha Wingate, Janet Bronstein, E. Michael Foster, and Milton Kotelchuck. 2015. "The Impact of the State Children's Health Insurance Program's Unborn Child Ruling Expansions on Foreign-Born Latina Prenatal Care and Birth Outcomes, 2000–2007." Maternal and Child Health Journal 19, no. 7: 1464–71.
- Fabi, Rachel, and Lauren Zahn. 2022. "Public Reason, Public Comments, and Public Charge: A Case Study in Moral and Practical Reasoning in Federal Rulemaking." Journal of Law, Medicine, and Ethics 50, no. 2: 322–35.
- Funkhouser, Suzanne, Kimberley A. Bullard, Alyssa R. Hersh, Karen S. Greiner, and Maria I. Rodriguez. 2021. "Postpartum Care Utilization among Emergency Medicaid Recipients." *Journal of Immigrant and Minority Health* 23, no. 5: 1121–25.
- García-Pérez, Mónica. 2019. "Recent Immigrants and Public Charge: Access to Coverage and New Legal Arrivals' Employment, Self-Employment, and Health Insurance after Medicaid Expansions and the Marketplace." Review of Black Political Economy 46, no. 3: 193–208.
- Guo, Hao, and Miaomiao Zou. 2022. "Do Non-Citizens Migrate for Welfare Benefits? Evidence from the Affordable Care Act Medicaid Expansion." *Frontiers in Public Health* 10: article ID 955257.
- Hwang, Grace. 2023. "The Impact of Access to Prenatal Health Insurance for Noncitizen Women on Child Health." *Health Services Research* 58, no. 5: 1066–76.
- Janevic, Teresa, Ellerie Weber, Frances M. Howell, Morgan Steelman, Mahima Krishnamoorthi, and Ashley Fox. 2022. "Analysis of State Medicaid Expansion and Access to Timely Prenatal Care among Women Who Were Immigrant vs. US Born." JAMA Network Open 5, no. 10: article ID e2239264.
- Johnston, Emily M., Jennifer M. Haley, Julia Long, and Genevieve M. Kenney. 2023. "New Mothers' Coverage Improved during the Public Health Emergency." August 31. https://www.urban.org/research/publication/new-mothers-coverage-improved -during-public-health-emergency.
- Joyce, Ted, Tamar Bauer, Howard Minkoff, and Robert Kaestner. 2001. "Welfare Reform and the Perinatal Health and Health Care Use of Latino Women in California, New York City, and Texas." American Journal of Public Health 91, no. 11: 1857–64.

- Kandula, Namratha R., Colleen M. Grogan, Paul J. Rathouz, and Diane S. Lauderdale. 2004. "The Unintended Impact of Welfare Reform on the Medicaid Enrollment of Eligible Immigrants." Health Services Research 39, no. 5: 1509-26.
- Kaushal, Neeraj. 2005. "New Immigrants' Location Choices: Magnets without Welfare." Journal of Labor Economics 23, no. 1: 59-80.
- Kaushal, Neeraj, and Robert Kaestner. 2005. "Welfare Reform and Health Insurance of Immigrants." Health Services Research 40, no. 3: 697–722.
- Kaushal, Neeraj, and Felix M. Muchomba. 2023. "Cost of Public Health Insurance for US-Born and Immigrant Adults." JAMA Network Open 6, no. 9: article ID e2334008.
- KFF (Kaiser Family Foundation). 2023. "Health Coverage and Care of Immigrants." September 17. https://www.kff.org/racial-equity-and-health-policy/fact-sheet/health -coverage-and-care-of-immigrants/.
- Lipton, Brandy J., Jefferson Nguyen, and Melody K. Schiaffino. 2021. "California's Health4All Kids Expansion and Health Insurance Coverage among Low-Income Noncitizen Children." Health Affairs 40, no. 7: 1075-83.
- Lurie, Ithai Zvi. 2008. "Welfare Reform and the Decline in the Health Insurance Coverage of Children of Non-Permanent Residents." Journal of Health Economics 27, no. 3: 786-93.
- Mahmud, Mir. 2016. "Immigrant Children's Access to Public Health Insurance after CHIPRA-2009." MPRA Paper 80602, University Library of Munich, https://ideas .repec.org/p/pra/mprapa/80602.html (accessed November 22, 2024).
- Mann, Cindy. 2009. "CMS Director Letter to State Health Officials." Baltimore Center for Medicaid and State Operations, Centers for Medicare and Medicaid Services, Department of Health and Human Services, September 3. https://www.medicaid .gov/federal-policy-guidance/downloads/SHO090309.pdf.
- Mann, Cindy. 2010. "Medicaid and CHIP Coverage of 'Lawfully Residing' Children and Pregnant Women." CMS Director Letter to State Health Officials SHO #10-006, CHIPRA #17, Baltimore Center for Medicaid, CHIP and Survey and Certification, Centers for Medicare and Medicaid Services, Department of Health and Human Services, July 1. https://downloads.cms.gov/cmsgov/archived-downloads /smdl/downloads/sho10006.pdf.
- Miller, Sarah, Laura R. Wherry, and Gloria Aldana. 2024. "Covering Undocumented Immigrants: The Effects of a Large-Scale Prenatal Care Intervention." National Bureau of Economic Research, Working Paper 30299, July. https://www.nber.org /papers/w30299.
- NILC (National Immigration Law Center). 2024. "Lawfully Present' Individuals Eligible under the Affordable Care Act." May 1. https://www.nilc.org/issues/health -care/lawfullypresent/.
- Park, Jin K., Medha D. Makhlouf, and Rachel Fabi. 2023. "Expanding Access to Health Care for DACA Recipients." New England Journal of Medicine 389, no. 5: 387-89.
- Pillai, Drishti, Samantha Artiga, Liz Hamel, Shannon Schumacher, Ashley Kirzinger, Marley Presiado, and Audrey Kearney. 2023. "Health and Health Care Experiences of Immigrants: The 2023 KFF/LATimes Survey of Immigrants." KFF, September 17.

- https://www.kff.org/racial-equity-and-health-policy/issue-brief/health-and-health-care-experiences-of-immigrants-the-2023-kff-la-times-survey-of-immigrants/.
- Rodriguez, Maria I., Ann Martinez Acevedo, Jonas J. Swartz, Aaron B. Caughey, Amy Valent, and K. John McConnell. 2022. "Association of Prenatal Care Expansion with Use of Antidiabetic Agents during Pregnancies among Latina Emergency Medicaid Recipients with Gestational Diabetes." JAMA Network Open 5, no. 4: article ID e229562.
- Rodriguez, Maria I., Megan Skye, Ann Martinez Acevedo, Jonas J. Swartz, Aaron B. Caughey, and K. John McConnell. 2023. "Postpartum Expansion of Emergency Medicaid Is Associated with Increased Receipt of Recommended Glycemic Screening and Care." Journal of Immigrant and Minority Health 25: 1221–28.
- Rodriguez, Maria I., Megan Skye, Stephan Lindner, Aaron B. Caughey, Ana Lopez-DeFede, Blair G. Darney, and K. John McConnell. 2021. "Analysis of Contraceptive Use among Immigrant Women Following Expansion of Medicaid Coverage for Postpartum Care." *JAMA Network Open* 4, no. 12: article ID e2138983.
- Royer, Heather. 2005. "The Response to a Loss in Medicaid Eligibility: Pregnant Immigrant Mothers in the Wake of Welfare Reform." Working paper, University of California, Santa Barbara. https://sites.google.com/site/heathernroyer/ (accessed May 6, 2019).
- Sabety, Adrienne, Jonathan Gruber, Jin Yung Bae, and Rishi Sood. 2023. "Reducing Frictions in Healthcare Access: The ActionHealthNYC Experiment for Undocumented Immigrants." American Economic Review: Insights 5, no. 3: 327–46.
- Saloner, Brendan, Neel Koyawala, and Genevieve M. Kenney. 2014. "Coverage for Low-Income Immigrant Children Increased 24.5 Percent in States that Expanded CHIPRA Eligibility." *Health Affairs* 33, no. 5: 832–39.
- Sommers, Benjamin D. 2010. "Targeting in Medicaid: The Costs and Enrollment Effects of Medicaid's Citizenship Documentation Requirement." *Journal of Public Economics* 94, nos. 1–2: 174–82.
- Steenland, Maria W., Rachel E. Fabi, Meghan Bellerose, Arielle Desir, Maggie S. White, and Laura R. Wherry. 2023. "State Public Insurance Coverage Policies and Postpartum Care among Immigrants." *JAMA* 330, no. 3: 238–46.
- Stimpson, Jim P., and Fernando A. Wilson. 2018. "Medicaid Expansion Improved Health Insurance Coverage for Immigrants, but Disparities Persist." *Health Affairs* 37, no. 10: 1656–62.
- Sun-Hee Park, Lisa, Rhonda Sarnoff, Catherine Bender, and Carol Korenbrot. 2000. "Impact of Recent Welfare and Immigration Reforms on Use of Medicaid for Prenatal Care by Immigrants in California." *Journal of Immigrant Health* 2, no. 1: 5–22.
- Swartz, Jonas J., Jens Hainmueller, Duncan Lawrence, and Maria I. Rodriguez. 2017. "Expanding Prenatal Care to Unauthorized Immigrant Women and the Effects on Infant Health." Obstetrics and Gynecology 130, no. 5: 938–45.
- Swartz, Jonas J., Jens Hainmueller, Duncan Lawrence, and Maria I. Rodriguez. 2019. "Oregon's Expansion of Prenatal Care Improved Utilization among Immigrant Women." *Maternal and Child Health Journal* 23, no. 2: 173–82.
- Wang, Scarlett Sijia, Sherry Glied, Claudia Babcock, and Ajay Chaudry. 2022.
 "Changes in the Public Charge Rule and Health of Mothers and Infants Enrolled in

- New York State's Medicaid Program, 2014–2019." American Journal of Public Health 112, no. 12: 1747-56.
- Watson, Tara. 2014. "Inside the Refrigerator: Immigration Enforcement and Chilling Effects in Medicaid Participation." American Economic Journal: Economic Policy 6, no. 3: 313-38.
- Wherry, Laura R., Rachel Fabi, Adam Schickedanz, and Brendan Saloner. 2017. "State and Federal Coverage for Pregnant Immigrants: Prenatal Care Increased, No Change Detected for Infant Health." Health Affairs 36, no. 4: 607–15.
- Wherry, Laura R., Genevieve M. Kenney, and Benjamin D. Sommers. 2016. "The Role of Public Health Insurance in Reducing Child Poverty." Academic Pediatrics 16, suppl. 3: S98-S104.
- Yasenov, Vasil I., Duncan Lawrence, Fernando S. Mendoza, and Jens Hainmueller. 2020. "Public Health Insurance Expansion for Immigrant Children and Interstate Migration of Low-Income Immigrants." JAMA Pediatrics 174, no. 1: 22-28.