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# POLICIES OF EXCLUSION: IMPLICATIONS FOR THE HEALTH OF IMMIGRANTS AND THEIR CHILDREN

Krista M. Perreira and

University of North Carolina at Chapel Hill

Author manuscript

Juan M. Pedroza University of California at Santa Cruz

## Abstract

Immigrants to the U.S. face the challenge of adapting to life in a new country with a different culture, norms, and social institutions. These social institutions include an array of federal, state, and municipal laws and administrative practices that can either facilitate or hinder immigrant integration. Guided by a structural framework for understanding social determinants of health, this review examines the literature on immigration-related policies that influence the health of immigrants. We begin with an overview of the pathways through which policies can influence health. We then discuss empirical research strategies for identifying the effects of policies on health. Next, we review evidence from federal welfare and health reforms, local immigration enforcement activities, and state and local immigrant integration policies. Our conclusion highlights the gaps in existing research and the steps that can be taken to better promote the health of immigrants and, consequently, their economic and social integration.

#### Keywords

immigration enforcement; anti-immigrant; health; undocumented/unauthorized; Hispanic/Latino; structural determinants

# INTRODUCTION

Between 1990 and 2015, the number of immigrants to the United States rose from 19.8 to 43.2 million (70). Comprising 13.5% of the U.S. population in 2016, these immigrants move to the U.S. from Latin America or the Caribbean (51%), Asia (31%), Africa (5%), Europe (11%), and other world regions (2%) (76). They include voluntary migrants seeking to reunify with their families and improve their economic circumstances. They also include involuntary migrants or refugees fleeing persecution, violence, and war in their home countries.

Disclosures: Dr. Perreira is a board member of the Population Association of America.

Corresponding Author: Krista M. Perreira, Carolina Population Center, CB #8120, 123 W. Franklin St., Chapel Hill, NC 27516; perreira@email.unc.edu; or 919-962-6152.

Upon their arrival in the U.S., immigrants face the difficult challenge of adapting to life in a new country with a different culture, social norms, and social institutions. These social institutions include an array of federal, state, and municipal laws and administrative practices (i.e. policies) that can either facilitate or hinder the adaptation of immigrants to the U.S. (21, 81). Guided by a structural framework for understanding social determinants of health (30, 139), this review examines the burgeoning literature on the policies that influence the health of immigrants to the U.S. We begin with an overview of the pathways through which policies can influence health. We then discuss empirical research strategies for identifying the effects of policies on health. Next, we review evidence from four veins of research on the effects of: (a) welfare and health reform, (b) immigration enforcement activities and raids, (c) state and local immigrant policies, and (d) immigration policies

conferring or denying legal-residency status to immigrant populations residing in the U.S. We conclude with a discussion of the gaps in research and the steps that can be taken to better promote the health of immigrants and, consequently, their economic and social integration into the U.S.

#### PATHWAYS OF INFLUENCE

Though the U.S. has no formal immigrant integration policies, a patchwork of federal, state, and municipal laws and administrative practices affect immigrants' access to education, employment, and health and human services (21, 80). With nearly one-quarter of children in the U.S. living with at least one immigrant parent, this patchwork not only affects the health and well-being of adult immigrants but also an estimated 15.8 million U.S.-born children of immigrants (77). Many of these children live in what are known as mixed-status families containing both U.S. citizens or lawfully-present immigrants and undocumented/ unauthorized immigrants (28).

Immigrant integration policies influence health outcomes for immigrants and their children both directly and indirectly (92, 100). Policies directly influencing the health of immigrants include those that explicitly enhance or curtail access to public and private health insurance and the provision of health care services through Federally-Qualified Community Health Centers (FQHCs) or local Departments of Public Health. Policies indirectly influencing the health of immigrants include a broader assortment of social policies that influence the availability of socio-economic resources essential to the production of health (e.g., educational attainment, employment, income, housing, and food). Policies (e.g., Englishonly laws) can also indirectly influence the health of immigrants and their children by influencing (or reflecting) how they are perceived by others and their own perceptions of belonging in a community (56, 138, 139).

Some of these policies are inclusive and potentially protective. They aim to blur the boundaries between foreign-born and U.S.-born Americans, recognizing foreign-born residents of the U.S. as "Americans in waiting" with the potential to become productive and loyal U.S. citizens (3, 80). Some of these policies are exclusionary and restrictive. They aim to brighten boundaries between foreign-born and U.S.-born Americans, curtailing their access to public services, education, and employment (3, 21). These policies of exclusion can legitimate discrimination, institutionalize racism, and foster fear and mistrust.

Attention to the effects of broader social policies on the health of immigrants largely began with the onset of welfare reform in 1996. The Personal Responsibility and Work Reconciliation Act of 1996 (PRWORA) created two categories of immigrants - qualified and non-qualified – and limited access to federally-funded health insurance, food assistance, and cash assistance depending on immigrants' qualified status, year of arrival to the U.S. (before/after August 22, 1996), and years of legal permanent residency in the U.S. (5 years or less vs. over 5 years) (39). Qualified immigrants include legal permanent residents (LPRs), refugees and asylees, and certain other categories of immigrants qualified for public assistance on humanitarian grounds. Non-qualified immigrants include undocumented/ unauthorized immigrants, persons with Temporary Protected Status (TPS), and other lawfully-present immigrants such as those with temporary student and work visas (39). PRWORA and related legislation also made it harder for low-income, lawfully-present immigrants to qualify for all federally-funded public assistance benefits by deeming their sponsors' income as their own income until they naturalize or complete forty quarters of qualifying employment (49). States, however, had the flexibility to restore select benefits by taking up optional federal coverage for some immigrant populations and providing statefunded substitutes (19, 39).

When Congress enacted the Affordable Care Act (ACA) in 2010, these dimensions of eligibility for access to federally-funded health insurance were maintained but they were not applied to subsidized or unsubsidized insurance purchased through the Health Insurance Marketplace (66). All lawfully-present noncitizens (including those with TPS, student, or temporary work visas) are eligible to purchase health insurance through the Marketplace regardless of their years of residency in the U.S. However, undocumented/unauthorized immigrant adults and children are prohibited from purchasing insurance through the Marketplace.

During the 2000s, attention to the effects of immigrant integration policies on health shifted to include the effects of local immigrant enforcement efforts and workplace raids (26, 29, 32). Adopted in 1996, Section 287g of the Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA) granted state and local law enforcement jurisdictions the option to participate in enforcing federal immigration laws. Yet law enforcement jurisdictions did not begin to participate in immigration enforcement until 2002–03. Participation grew slowly, but by 2009 76 state and local jurisdictions (covering at least one-fifth of all U.S. counties) had 287g agreements with Immigration and Customs Enforcement (ICE) (140). The launch of the Secure Communities (SComm) program in 2008 further amplified the role of law enforcement in immigration enforcement by requiring that local police match fingerprints of all arrested individuals with an ICE database to screen for immigration violations. The increase in local immigration enforcement throughout the 2000s has been accompanied by an increase in the detainment and deportation of immigrants and increased attention to their effects on both the health of detainees and deportees as well as the health of family members left behind (29).

At the same time, state and local governments began to adopt both restrictive and inclusive immigrant integration policies. While states and local governments cannot regulate who can reside within their boundaries, they can enact laws or resolutions and administrative

regulations designed to affect access to state or local education, employment, health, and human services. Notable examples of such legislation include California's Proposition 187 passed in 1994 and Arizona's SB 1070 passed in 2010 (115, 119, 144). Though full implementation of these two particular laws was ultimately blocked by the U.S. Supreme Court, other state-level laws have been implemented. Between 2007 and 2017, states enacted approximately 200–500 immigration-related laws/resolutions each year (84, 85). The most well-studied of these laws include laws allowing or explicitly denying undocumented/ unauthorized immigrant students access to in-state residency tuition (IRT) benefits for postsecondary education in community colleges and public universities, laws allowing or denying access to state IDs and driver's licenses, and E-verify laws requiring employers to verify the work authorization of new hires. The adoption of more restrictive state immigrant policies has been associated with anti-immigrant anxieties that reflect both economic insecurity and growing proportions of immigrants who are racialized (i.e. perceived as nonwhite) in a state (55, 146). Thus, any associations between these policies and immigrant health may reflect not only their associations with reductions in socio-economic resources but also their associations with anti-immigrant sentiment and hostility.

Finally, during 1990 to 2007, the number of undocumented/unauthorized immigrants increased from 3.5 to 12 million before stabilizing at 11 million for the past 10 years (94). As a result, research throughout this period has attempted to understand the health consequences of immigration laws conferring or denying legal residency to immigrant populations residing in the U.S. This research encompasses studies on differences in the health of immigrants by their immigration status (e.g., U.S.-born citizen, naturalized citizens, lawfully-present noncitizen, or undocumented/unauthorized immigrant) and the health of U.S. citizen children by their parents' immigration status. It also includes recent research on the health of immigrants with more liminal legal residency such as those who received Deferred Action for Childhood Arrival (DACA) or migrated to the U.S. as unaccompanied child migrants (UCM) seeking political asylum (13, 75).

#### **IDENTIFICATION AND MEASUREMENT STRATEGIES**

In studying the consequences of immigrant integration policies, researchers have taken two complementary approaches. The first approach has focused on understanding the effects of these policies on immigrants through state and local case studies utilizing qualitative interviews and/or focus groups with immigrants and their families as well as service providers in community-based organizations (CBOs) and public agencies (e.g., 34, 46, 47, 98). These in-depth qualitative approaches allow researchers to understand how policies and practices shape the daily-life experience of immigrants, their families, and those who provide services to them.

The second approach utilizes quantitative data to identify statistical associations between policies, immigration or citizenship status, and outcomes. One set of quantitative studies attempts to identify the causal effects of policies. These studies often utilize variation in the timing and implementation of policies across states/counties together with variation in the populations affected by policy changes within states/counties (e.g., 63, 86, 102, 140, 146). Essentially, the difference in the effects of policies before and after implementation are

compared for the populations affected by the policy change (e.g., noncitizens) versus those not affected (or less affected) by the policy change (e.g., U.S. citizens). These difference-indifference methods help to ensure that the effects identified are attributable to the policy change and not other changes (e.g., a recession or economic boom) that occurred contemporaneously.

Within these studies, the implementation of policies has been measured in several unique ways. For example, Kaushal and Kaestner used variation in welfare caseloads over time and across states to identify the effects of welfare reform on health insurance, healthcare utilization, and health among low-income immigrant women and their children (64). Watson and others used deportation data from the U.S. Department of Homeland Security (DHS) over time and by U.S. regions to identify the effects of immigration enforcement efforts on the Medicaid and WIC participation of children of noncitizens (132, 141). Potochnick et al. and others utilized data on whether individuals live in an area with a 287g agreement to identify the effects of these agreements on food insecurity and health (102, 140). Additionally, researchers have created scales based on the frequency and/or severity of statelevel, inclusive or restrictive immigrant policies to identify the effects of these policies on economic and health outcomes among immigrants (54, 148). Because states may administer a mixture of policies which are both inclusive and restrictive, it is essential that these coding schemes allow for the full range of policies.

A second set of quantitative studies focuses on identifying immigration status and evaluating differences in outcomes by adults' and children's immigration status or the status of their parents. The methodological challenge for these studies is the identification of undocumented/unauthorized immigration status (15, 27, 88, 123, 126). Given legitimate concerns about the disclosure of undocumented/unauthorized immigration status, few state or national surveys directly ask about U.S. immigration status. In those surveys that do (e.g., the Survey of Income and Program Participation or the California Health Interview Survey), the typical approach is to ask about some combination of place of birth, U.S. citizenship, legal permanent residency (LPR or "green card") status, and other visa status (e.g. refugee/ asylees, TPS, student visa). Those who report that they are foreign-born noncitizens with no green card or visa are assumed to be undocumented/unauthorized immigrants or imputed to be undocumented/unauthorized immigrants (104). Among the foreign-born, rates of missing responses on these series of questions are surprisingly low -2% to 5% (15). In surveys lacking data on immigration status (e.g., the Current Population Survey), researchers have developed imputation strategies which involve assigning undocumented/unauthorized status based on probabilities estimated from information on country of origin, years in the U.S., state of residence, occupation, educational attainment, age, and sex (93, 126). The most highly-regarded of these methods utilizes multiple imputation to adjust for uncertainty in the measurement of undocumented/unauthorized status (126). However, even when these studies convincingly assign undocumented/unauthorized immigration status to survey participants, they still must contend with the reality that undocumented/unauthorized immigration status is not assigned randomly to individuals. Thus, without the use of more sophisticated analytical methods (e.g., propensity score matching), it is difficult to say with certainty that differences in an outcome by undocumented/unauthorized immigration status result from their status (per se) rather than differences in both observable and unobservable

characteristics of those who are undocumented/unauthorized immigrants and those who are not.

A third set of quantitative studies focuses on the degree of worry, stress, or fear associated with local immigration enforcement efforts, state-level restrictive immigrant policies, undocumented/unauthorized status, and sentiments towards immigrants (14, 79, 133). For example, the annual Pew National Survey of Latinos asks, "Regardless of your own immigration or citizenship status, how much, if at all, do you worry that you, a family member, or a close friend could be deported?" (109). Arbona et al. developed a 7-item scale to assess whether individuals avoided or did not engage with common activities (e.g., applying for a driver's license, seeking help from public agencies, and reporting crime to the police) because of "fear or concerns of being deported" (11). To measure state-level public sentiments about immigrants, Morey et al. and Van Hook et al. utilized 5 items from the General Social Survey (GSS) regarding attitudes towards increasing immigration, attitudes towards undocumented/unauthorized immigration, and beliefs about immigrants' effects on job opportunities, crime, and the economy (79, 127). The stress and fear associated with undocumented/unauthorized status and the risk of deportation is not only prevalent among those without legal-residency status but also among their friends and family who experience what has been termed "vicarious illegality" and among all persons whose legal presence in the U.S. is questioned because of their race/ethnicity (12, 43, 134). Thus, studies utilizing these methods help to identify the broader, spillover effects of restrictive policies and antiimmigrant sentiments on groups and individuals not specifically targeted by such policies.

#### WELFARE REFORM AND HEALTH REFORM

Historically, immigrants have participated in public assistance programs at lower rates than U.S.-born natives (16, 19). These public assistance or safety-net programs include cash assistance (i.e. Temporary Assistance for Needy Families, TANF, and Supplemental Security Income, SSI), food assistance (i.e. the Supplemental Nutritional Assistance Program, SNAP), and medical assistance (i.e. Medicaid and the Children's Health Insurance Program, CHIP).

As intended by Congress, both immigrants' and U.S.-born natives' use of most public assistance benefits – TANF, SSI, SNAP, and Medicaid/CHIP – declined after welfare reform (19, 38, 51). However, in the first 2–4 years after welfare reform, public assistance participation rates declined relatively more for immigrants than for U.S.-born natives (23, 24, 63, 69, 125). Some of these declines were explained by improvements in the economy that helped to reduce the need for public assistance benefits (20, 51, 69). However, other declines were attributable to "chilling effects" – immigrants who were eligible for public assistance benefits failed to take up benefits for themselves or their children because they were either confused about their eligibility, intimidated by the application process, or feared being labeled a public charge (i.e. an individual who is likely to become reliant on public assistance and deemed ineligible to become a LPR or citizen of the U.S.) (38, 98). The evidence is mixed, suggesting few chilling effects for immigrants participating in TANF or SSI, with stronger chilling effects for immigrants participating in SNAP and Medicaid/CHIP (49, 51, 63, 65, 125).

Responses of immigrants and states weakened the effects of welfare reform on immigrants' public assistance participation rates. Immigrants responded to welfare reform by naturalizing at significantly higher rates after reform (23, 125, 128). States responded with extensive outreach efforts to encourage and facilitate the enrollment of eligible immigrants into programs, especially Medicaid/CHIP and SNAP, after the initial declines in their enrollment became apparent (1, 2, 49, 65). Additionally, some states responded to welfare reform by opting to continue coverage of qualified immigrants and even expanding coverage to some non-qualified immigrants using state-only funds (39).

Nevertheless, research evidence indicates that these declines in public assistance coverage had negative consequences for poverty and food security in households headed by immigrants. Though immigrants' employment rates increased, they tended to find employment in low-wage jobs without health insurance (59, 63). After welfare reform, increases in unemployment during the 2008–09 Great Recession led to greater increases in poverty among children in immigrant-headed households than children in households headed by U.S.-born natives (19). Declines in SNAP receipt and benefit allotments made to children of noncitizens resulted in higher levels of food insecurity among these children (127).

Moreover, declines in public assistance coverage led to reductions in health insurance coverage and health utilization among the most vulnerable populations of immigrants – women and children. The proportion of uninsured among low-educated, foreign-born unmarried women increased, resulting in delays in obtaining medical care and declines in annual physicians' visits for this population (63, 64). Most research (see Joyce et al. (57, 73) and Loue et al. (72) for exceptions) suggests that the health consequences of welfare reform were particularly severe for pregnant Hispanic/Latina women living in states that fully implemented immigrant eligibility restrictions in their Medicaid/CHIP programs rather than preserving or expanding Medicaid/CHIP coverage. In these states, noncitizen Hispanic/Latina women had significantly lower prenatal and perinatal health care use (36, 41). Some evidence also suggests that reforms reduced health insurance coverage among children of immigrants and led to poorer health among those who lost TANF and Medicaid/CHIP coverage (61, 63).

The 2010 Affordable Care Act had the potential to restore and improve coverage for many lawfully-present immigrants (66). All U.S. residents (including immigrants) benefited from provisions in the ACA to (a) expand dependent coverage up to age 26, (b) eliminate preexisting condition clauses from private coverage, (c) provide states with the option (and enhanced federal funding) to expand Medicaid eligibility, (d) provide premium and costsharing subsidies to lower-income populations, (e) expand funding for community health centers, and (f) require the provision of culturally/linguistically appropriate materials by insurers and increase funding for translation services for Medicaid/CHIP. However, despite these reforms, health insurance coverage for undocumented/unauthorized immigrants was still limited to Emergency Medicaid; they were ineligible for the Medicaid expansion and prohibited from buying coverage through the ACA's insurance Marketplaces even if they used their own funds.

Because most of the ACA's coverage provisions were not implemented until 2014, little data on the ACA's effects on immigrants' insurance status and health are currently available. For many U.S. residents, preliminary evidence shows higher health insurance rates, especially among states adopting the Medicaid expansion option; increases in outpatient utilization and preventive care; reductions in emergency department use; and improved self-reported health after the ACA's implementation (40, 58, 114). As of 2016, undocumented/unauthorized immigrants left out of health reform and lawfully-present immigrants had the highest uninsured rates among the nonelderly (39% and 17% respectively) compared to 9% of U.S. citizens (60).

#### **IMMIGRATION ENFORCEMENT: WORKPLACE RAIDS AND DEPORTATIONS**

After the passage of IIRIRA in 1996, formal deportations (i.e. compulsory removals) of immigrants steadily increased from 114,432 per year in 1997 to a peak of 433,034 per year in 2013 (122). Although there have been modest declines since 2013, deportations have remained high with 340,056 reported in 2016 (122). Many more immigrants (352,882 in 2016) are detained in prison-like facilities while awaiting a review of their deportation cases (124, 137). While the majority of these detentions and deportations occur at the border, an increasing percentage involve Immigration and Customs Enforcement (ICE) activities within the interior of the U.S. (111, 124). During the early 2000s, these interior enforcement (IE) activities often involved highly visible raids (26, 32). As 287g and SComm programs were implemented, these IE activities became embedded in local law enforcement efforts (29). As a result, arrests for traffic violations such as driving without a license or driving under the influence (DUI) could lead to detainment and subsequent deportations (29, 111). In contrast to popular beliefs, detentions and deportations of immigrants are also not limited to undocumented/unauthorized immigrants. They include detentions and deportations of lawfully present immigrants with legal permanent residency.

These local IE activities have had well-documented effects on health care access, health and, their determinants (i.e. income, employment, and education). First, IE activities have had broad community effects. They have been associated with a heightened sense of fear in immigrant communities, leading individuals to avoid common activities that involve interactions with public officials (11, 48, 72, 96, 109). Consequently, increasing deportation rates have been associated with reductions in enrollment in both the Medicaid and the Women, Infant, and Children (WIC) program among noncitizens (130, 132, 141). Reflecting the negative health consequences of increased psychosocial stress, workplace raids, increasing deportation rates, and the fear of deportation have also been significantly associated with: (1) increased poor general health, (2) poor cardiovascular health, (3) selfreported mental health problems, (4) food insecurity, (5) delays in receiving prenatal care, and (6) increases in low birthweight babies among Hispanics/Latinos, especially among those who are foreign-born Hispanic/Latino noncitizens (31, 34, 72, 86, 102, 106, 120, 133, 140). Finally, IE activities have also been associated with reduced K-12 school completion, reduced employment, increased childhood poverty, and an increased reticence to trust the judicial system and report crimes (7, 8, 67, 90).

Second, IE activities have had effects on the many U.S. citizen spouses/partners, children, and extended family of detainees and deportees. Some estimates suggest that at least onefifth of deportations involve a parent with an average of two U.S.-born children (29). In large part through qualitative and mixed-methods studies, researchers showed that family (mostly mothers and children) left behind after parental detainments and deportations experience increased economic hardship, psychological distress, externalizing behavioral problems such as aggression, internalizing behavioral problems such as anxiety and depression, and loss of educational aspirations (35, 42, 45, 50, 74). Moreover, the forced family separation initiated by detainments and deportations leads to changes in family dynamics and family functioning that has detrimental consequences for child development (18, 25). Studies evaluating statistical differences between individuals/families with and without a deported friend/parent find unequivocal results – deportations harm the socio-emotional well-being of the friends, parents, and children left behind (4, 25, 34, 110, 131, 150).

Third, IE activities have had their most direct effects on the health and well-being of detainees and deportees themselves and the children who leave the U.S. to live with deported parents in a foreign country. Few systematic studies of adults and children held in detention are available. However, case studies and reports from multiple government agencies have identified high rates of suicidality and depression and documented serious deficiencies in medical evaluation and treatment within detention centers (82, 137). After deportation, both qualitative interview and survey data show that adult deportees and the U.S.-born children who sometimes leave the U.S. to join their deported parents experience significant symptoms of psychological distress and material deprivation, feel socially isolated, and have difficulties integrating into schools or workplaces (10, 22, 97, 143). Ten to twenty percent have experienced sustained physical or verbal abuse during the deportation process (9).

### STATE AND LOCAL IMMIGRANT POLICIES

In addition to local immigration enforcement efforts, state and local immigrant policies shape immigrant families' health as well as the health of U.S.-born citizens perceived to be immigrants (100, 118). State-level studies in Alabama, Arizona, and California have found that state laws restricting immigrants' rights and stigmatizing undocumented/unauthorized immigrants had chilling effects on utilization of preventive health care services among immigrants, especially Hispanic/Latino immigrants (115, 119, 144). National studies also show that perceptions of restrictive immigrant policies and anti-immigrant sentiments in a state are associated with higher mortality, poorer self-reported health, and poorer mental health among Hispanic/Latino adults and children, especially those in mixed-status families (54, 79, 133, 135). These changes in utilization and health occurred despite limited and inconclusive evidence from national studies that restrictive state immigrant policies reduce health insurance coverage or that inclusive state immigrant policies improve health insurance coverage (5, 147).

These effects on health and utilization potentially stem from the effects of state-level restrictive policies and anti-immigrant sentiments on perceived discrimination and stress as well as other social determinants of health such as poverty, income, and education (78, 100). Multiple studies show that Asian and Hispanic/Latino communities feel threatened by anti-

immigrant sentiment in the states in which they reside and experience lower quality of life as well as high rates of discrimination, acculturative stress, and psychological distress regardless of their legal-residency status (6, 11, 17, 71, 107, 113, 118). Moreover, state-level restrictive policies (e.g., E-verify) have been associated with greater unemployment among Mexican noncitizen men and higher poverty rates, whereas more inclusive policies (e.g., IRT benefits) have been associated with increased high school graduation rates and college enrollment (62, 91, 101, 148).

#### LEGAL RESIDENCY AND DACA STATUS

Even in the absence of workplace raids, deportations, and restrictive state/local immigrant integration policies, the persistent vulnerability of undocumented/unauthorized status has been linked to low health care utilization and poor health (44, 46). Legal residency status stratifies immigrant populations in the U.S. by creating a permanent class of U.S. residents with reduced access to the institutional resources that promote health and with greater exposure to acute and chronic stressors that can undermine health for themselves and their children across the life course (121).

Ineligible for public health insurance benefits and excluded from purchasing health insurance in the Marketplaces, undocumented/unauthorized immigrants have the lowest rates of health insurance coverage in the U.S. (60). Compared to those with legal-residency status, undocumented/unauthorized Hispanic/Latino immigrant adults also are less likely to have a usual source of care, annual doctor visits, and preventive health screenings (33, 104, 108, 129). These differences in utilization by legal-residency status can mostly be explained by differences in health insurance coverage and other observable characteristics (104, 129). Though there are no difference in emergency department use by immigration status (129), the lack of insurance coverage for undocumented/unauthorized immigrants does leave many dependent on Emergency Medicaid for childbirth and life-sustaining medical care such as dialysis. In at least one state, North Carolina, the lack of health insurance coverage was associated with an increase in Emergency Medicaid expenditures from 2001–2004 (37).

Nationally, undocumented/unauthorized immigrant children also have the lowest rates of health insurance coverage in the U.S. (60). Additionally, state-level data from California suggest U.S.-born children of undocumented/unauthorized parents are less likely to be insured than U.S.-born children with U.S.-born parents (89, 116, 145). California is also the only state to have sufficient data to evaluate differences in health care utilization by children's or parental legal-residency status. Results are equivocal. One study suggests no significant difference in annual physician visits by either children's or parents' legal-residency status and two studies suggest that children who are undocumented/unauthorized immigrants and/or have a parent who is undocumented/unauthorized have fewer annual physician visits than U.S.-born children with a U.S.-born parent (89, 116, 145).

Nevertheless, these differences in health insurance coverage and access to care are not uniformly associated with poor health. Although subject to substantial criticism, research on the immigrant paradox has typically found that immigrants have better health status than U.S.-born natives (30). Reduced access to insurance coverage and health care among

undocumented/unauthorized immigrants may diminish the foreign-born advantage but may not entirely erode it. Moreover, as discussed above, restrictive policies and anti-immigrant biases can affect the well-being of all foreign-born persons regardless of their legal residency as well as the well-being of their U.S.-born family members.

Focusing on pregnant women, one set of studies finds that, compared to all other women, undocumented/unauthorized pregnant women are less likely to have adequate prenatal care visits and more likely to experience complications during delivery, to have preterm births, and to have low-birthweight babies (83, 105). When Medicaid coverage is expanded to include undocumented/unauthorized pregnant women, prenatal care visits increase, rates of extremely low birthweight decline, and infant mortality declines (117). By the same token, when Medicaid coverage is rescinded, adverse birth outcomes and their associated costs rise (83).

In research devoted to mental health, another set of studies finds that undocumented/ unauthorized Hispanic/Latino immigrant adults (compared to legally-residing immigrants) experience greater acculturative stress, traumatic events, and depressive symptoms (11, 44, 87, 99). However, at least one study finds no difference in mental health by legal residency status (149). Regarding the mental health of Hispanic/Latino immigrants' children, studies also find that undocumented/unauthorized immigrant children and U.S.-born children with undocumented/unauthorized parents are more likely to experience both internalizing (e.g., depression and anxiety) and externalizing (e.g., aggression) behavioral problems (68, 103). Moreover, studies find that the receipt of DACA can lower an undocumented/unauthorized immigrants' risk of mental health problems and also promote the psychological well-being of their children (52, 95, 136).

Only two studies compare the physical health of undocumented/unauthorized immigrants with the physical health of legally-residing immigrants. They find no differences in self-reported health or blood pressure by legal residency until after stratifying by gender or years in the U.S. (142, 149). As compared to legally-residing immigrants, these results suggest that among Hispanics/Latinos more recent undocumented/unauthorized immigrants and those who are female may have poorer health as measured by self-reported health, high blood pressure, and Body Mass Index (BMI).

#### NEXT STEPS: IMPROVING THE HEALTH OF IMMIGRANTS

Immigrants can be viewed as "Americans in waiting" who have the potential to become productive and loyal U.S. citizens (80). From this perspective, immigration is a transition and the U.S. should structure federal, state, and local policies to facilitate this transition. Policies of inclusion welcome immigrants with community-based resource centers and individuals to help them navigate their new environments. Policies of inclusion provide resources to assist immigrants with learning English while maintaining proficiency in other languages. Policies of inclusion provide immigrants with the same access to health and human services provided to U.S. citizens. Ultimately, policies of inclusion establish a foundation for mutual understanding, learning, and trust.

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Yet over the past two decades, the U.S. federal government and many state governments have increasingly adopted policies of exclusion. These policies have restricted access to public assistance benefits, post-secondary public education, and employment opportunities. They have increased detentions and deportations of both lawfully present and undocumented/unauthorized immigrants and made it increasingly difficult for immigrants to obtain legal permanent residency even when they have U.S.-born citizen spouses and children.

Although these policies target immigrants, they have widespread consequences for all U.S. citizens, especially those from racial/ethnic or religious minority populations. They stigmatize immigrant workers and those who employ them. They perpetuate fear and create a sense of threat for anyone whose skin color is not white, who speaks with an accent, or who fails to conform to the dominant behavioral and phenotypical expectations of "American." They force separation between spouses with mixed-status, between grandparents, parents, and their U.S.-born citizen children, and between brothers and sisters born with differing citizenships.

This review has summarized the many health consequences of U.S. federal and state policy choices. The negative health consequences of our current policies begin during pregnancy with inadequate prenatal care and increased risk of adverse pregnancy outcomes, especially among foreign-born noncitizen Hispanic/Latino women. The negative health consequences continue into early childhood and adolescence with increased risk of internalizing and externalizing behavioral problems, especially among children forcibly separated from a detained or deported parent. They also continue into adulthood with increased psychosocial stress, prevalence of self-reported mental health problems, poor general health, and poor cardiovascular health among racialized immigrants threatened by deportation. Overall, though previous cohorts of immigrants have arrived in the U.S. with an immigrant health advantage, this advantage may decline across future arrival cohorts (53). Moreover, our current policies appear to lead to the rapid erosion of any health advantage as immigrants and their U.S.-born children find their place in an America segmented by racial/ethnic and socio-economic backgrounds.

In the coming decade, continued monitoring and evaluation of the health consequences of U.S. immigrant integration policy choices will be needed. Within the past year, policies of exclusion have been expanded and more are currently under consideration. Although it was rescinded on June 20, 2018, the U.S. DHS adopted a policy on May 4, 2018 requiring the federal prosecution of all immigrants crossing the U.S. border without legal authorization and forcing the separation of parents from children as they await federal prosecution for entry without authorization and review of their asylum cases. The policy resulted in nearly 3000 children being separated from parents and placed in detention. In late 2017 and early 2018, the U.S. DHS also announced decisions to terminate TPS for El Salvadorians, Haitians, Hondurans, Nicaraguans, Nepalese and Sudanese. These populations have at most 18 months to voluntarily leave the U.S. (with or without their U.S.-born citizen spouses and children) or remain in the U.S. as undocumented/unauthorized immigrants and face deportation. Finally, the DHS has proposed expanding the definition of a public charge to include persons who receive publicly-funded health insurance coverage including Medicaid/

CHIP or federal subsidies for private health insurance. Given the current research evidence, each of these new policies has the potential to further harm the health of immigrants and their children.

As monitoring and evaluation of the health consequences of these policies continues, researchers need to expand their consideration of different dimensions of health outcomes and determinants with longitudinal data that better reflect the diversity of immigrants in the U.S. Most current research focuses on short-term consequences of policies for access to care and mental health, especially among pregnant women and children. More attention is needed on the long-term health effects of these policies, especially on physical health and men's health. Additionally, research on public policies and immigrant health has focused on Hispanic/Latino populations. Greater attention is needed to the health of African, Asian and Middle Eastern immigrant populations, especially those with Muslim religious backgrounds. For all these population groups, research requires greater country-of-origin precision with an understanding of the socio-political histories of each immigrant population.

As monitoring and evaluation continues, researchers also need to evaluate the emergence of "welcoming-city" initiatives (55). These initiatives reflect the proactive efforts of immigrants and community-based partners to respond to exclusionary policies. Within welcoming cities, a myriad of institutions including schools, health providers, other social service providers, faith-based organizations, and community networks support the integration of immigrants and help them navigate an increasingly complex environment. These institutions should be supported with information about how to address health issues among immigrants and their families, maintain their access to healthcare, and develop interventions that address specific concerns such as mental health associated with fear of deportation. Moreover, efforts to integrate immigrants can coexist with restrictive initiatives. Thus, future research should analyze whether inclusive policies promote health outcomes or mitigate the possible harm of restrictive policies.

While essential, efforts to monitor and evaluate the health consequences of current policy choices need to be undertaken with considerable care and caution. For example, the modification and addition of questions to national, state, and local surveys regarding politically charged and sensitive topics such as citizenship and visa status must be implemented only after rigorous evaluation of misreporting and their potential effects on response rates. Furthermore, these efforts should only happen in conjunction with well-evaluated strategies to protect the anonymity and confidentiality of respondents. Finally, these efforts should be combined with outreach and education to study participants regarding the rationale for these questions and their rights to refuse to answer.

Though this review is focused on the U.S., the U.S. is not alone in its move towards adopting policies of exclusion. The European Union (EU), Australia, and other high-income countries continue to struggle with how best to select and incorporate immigrant populations. Antiimmigrant and nationalist sentiments have increased in many of these high-income countries, leading them to adopt policies of exclusion and to set aside the potential for inclusion and integration (112). Thus, research on the health consequences of policies of exclusion could benefit from the adoption of a more cross-national comparative framework.

Cross-national comparisons can improve understanding of how different socio-political and institutional structures influence the adaptation and health of immigrants.

In keeping with a structural perspective, public health research on the consequences of immigrant integration policies must also continue to consider the broader economic and social consequences of these policies. The literature summarized within this review demonstrated that more restrictive (less inclusive) policies cannot only lead to poorer health but can also lead to poorer education and employment outcomes among immigrants and their children. By creating structural barriers to integration and opportunity for some but not for others, these policies determine who is ultimately defined as educated, middle-class, poor, or a criminal. They define who is deserving and who is not, who is welcome and who is not, and ultimately who is American and who is not. As we consider the evidence and make policy choices, we must do so with the recognition that these choices define our future.

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