

A Scoping Review of Literature About Mental Health and Well-Being Among Immigrant Communities in the United States

Darlene Xiomara Rodriguez, PhD, MSW, MPA¹

Jessica Hill, MPH¹

Paul N. McDaniel, PhD¹

Immigration—both the experience of migrating and events after migration—can affect the mental health and well-being of immigrants and their communities. However, evidence suggests that immigrants in the United States do not access mental health services to the same extent as nonimmigrants. In particular, immigrant adolescents and young adults may have unique stressors related to their developmental stage, experiences in school and with peer groups, and shifting roles within family systems. This scoping review summarizes findings from published research studies and practitionerfocused gray literature about the mental health needs of immigrant communities in the United States. The review finds that specific mental health needs vary across factors like age, racial/ethnic group, immigration status, and place of residency. Findings also indicate that structural factors like immigration-related laws affect both access to mental health services and stressors in the overall environment for immigrants and their families. This review also explores models of community-level initiatives that utilize strengths-based approaches to promoting mental health and well-being among immigrant communities. Findings highlight the need for a better understanding of the mental health needs and current barriers to care among diverse immigrant populations, as immigration continues to play a major role in U.S. public policy and discourse. The COVID-19 pandemic taking place as this article goes to press in 2020 also raises questions regarding health equity and access for marginalized populations, including immigrants and their communities, and so these findings also indicate

Health Promotion Practice

March 2021 Vol. 22, No. (2) 181–192 DOI: 10.1177/1524839920942511 Article reuse guidelines: sagepub.com/journals-permissions © 2020 Society for Public Health Education the need for further interdisciplinary research to assess intersections among the pandemic's many impacts, including those related to mental health and well-being.

Keywords:

health disparities; qualitative research; health research; international/cross-cultural health; minority health; social determinants of health

n 2018 about 45 million U.S. residents were born in countries other than the United States, accounting ▲for over 13% of the country's overall population (U.S. Census Bureau 2019). Immigrant populations in the United States represent diverse regions of origin: 51% of immigrants living in the United States originally migrated from Latin America and the Caribbean, 31% from Asia, 10% from Europe, and 8% from all other regions of the world (U.S. Census Bureau, 2019). However, geographical region of origin is only one of many considerations regarding the diversity of immigrant populations in the United States. Factors related to age, gender, reasons for migrating, socioeconomic status, and immigration status also contribute to diversities among immigrant experiences before and after migration (Diaz et al., 2017; Shor et al., 2017).

One factor that affects immigrant experiences after migration is their legal classification by the U.S.

¹Kennesaw State University, Kennesaw, GA, USA

Authors' Note: Address correspondence to Darlene Xiomara Rodriguez, Social Work and Human Services, Kennesaw State University, 520 Parliament Garden Way NW, MD 4103, Kennesaw, GA 30144-5591, USA; e-mail: drodri30@kennesaw.edu. government. The U.S. government differentiates between foreign-born residents whom it has authorized to live and to work in the U.S., foreign-born residents whom it has authorized temporarily (with permission to work or without permission to work), and foreign-born individuals who entered the U.S. without authorization or who overstayed the time of their initial authorization, a group the government describes as "deportable aliens" (U.S. Department of Homeland Security, 2018). In 2017, over three quarters of the immigrant population in the United States, or 35.2 million people, were authorized immigrants, including naturalized citizens (45% of the total immigrant population), lawful permanent residents (27% of the total immigrant population), and temporary lawful residents (5% of the total immigrant population); an additional 10.5 million people (23% of the total immigrant population) were considered unauthorized immigrants (Radford, 2019). Furthermore, the authors of this article have described ways in which different local, state, and federal laws result in multiscalar and often inconsistent immigration-related policies, and how such combinations result in different facilitators or barriers to immigrant integration in different geographic locations (Furuseth et al., 2015; McDaniel, 2018; McDaniel et al., 2017; McDaniel, Rodriguez, & Krumroy, 2019; McDaniel, Rodriguez, & Wang, 2019; McDaniel & Smith, 2017; D. X. Rodriguez et al., 2018; D. X. Rodriguez, McDaniel, & Bisio, 2019).

This article about the mental health and well-being of immigrant communities in the United States summarizes findings from a larger scoping review of published research studies and practitioner-focused gray literature regarding the health of immigrant populations in the United States. The review included literature comparing immigrant populations in the United States with nonimmigrant populations, which illustrated disparities related to a variety of factors that affect health (Garfield et al., 2019; Hacker et al., 2015; Stimpson et al., 2012; Stimpson & Wilson, 2018; Yeo, 2017). Mental health and well-being, and specifically the mental health and well-being of youth and adolescents, emerged from the review as a key issue for immigrant health.

While there are many ways to define mental health, this review uses the following definition from the World Health Organization (2018):

Mental health is a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively, and is able to make a contribution to his or her community.

This definition includes both individual-level facets of well-being and relational aspects between the individual, their social communities, and their physical environments.

The review is organized as follows. First, we outline our methodology and the steps we undertook to complete a scoping review of the literature. Next, we discuss findings regarding disparities in mental health service needs and usage between immigrants and nonimmigrants. Third, we explore the ways structural factors affect both access to mental health services and social stressors for immigrants and their families. Fourth, we present findings regarding the impact of immigrationrelated laws and policies, with a focus on youth and adolescents with immigrant backgrounds. Research regarding the experiences of young adult and adolescent immigrants is significant, because in 2018, youth aged 18 and younger represented almost 6% of the U.S. residents who were born in other countries (U.S. Census Bureau, 2019). Finally, we discuss examples of strengthsbased approaches to promoting the mental health and well-being of immigrant communities.

SCOPING REVIEW METHODOLOGY

In summer 2019, an interdisciplinary group of researchers at Kennesaw State University near Atlanta, Georgia, conducted a literature review about the intersections of immigration and health in the United States and other countries. Group members represented various disciplines including conflict studies, population and urban geography, public health, public policy, and social work. The overall review included research studies and practitioner-focused gray literature. Initially, the review was intended to inform future research activities at our institution, as well as grant-writing initiatives to support partnerships with area community-based organizations (D. X. Rodriguez & McDaniel, 2019). The main research questions of the overall review were the following:

Research Question 1: What does existing literature tell us about immigration and health equity in the United

Research Question 2: What does existing literature tell us about the role of immigration status as a social determinant of health in the United States?

The methodology for this review aligned with the framework Arksey and O'Malley (2005) proposed for a scoping study, which they described as one way of gathering and synthesizing the diverse types of literature relevant to a topic. This process has several similarities and differences to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines outlined by Moher et al. (2009). Both processes begin with specific research questions, present the rationale for such questions, and describe their methods of study selection and data collection. Additionally, both processes present a synthesis of the results. However, Arksey and O'Malley (2005) identified several reasons for conducting a scoping review, including evaluating and disseminating key themes rapidly.

In this spirit, the authors synthesized findings of a subset of the original scoping review into this article in order to support timely dissemination to inform broader research, policy, and practice initiatives. For this reason, the scoping review includes a variety of sources—both peer-reviewed literature and gray literature—that provide insights on this topic. This scoping review is not intended to present an exhaustive overview of the literature on this topic but instead seeks to offer timely summaries of current key issues related to both the mental health needs among immigrant communities in the United States and characteristics of current strengths-based approaches to meeting such needs. The results of this scoping review can inform a variety of research, policy, and practice initiatives regarding the mental health of immigrant populations in the United States.

As a first step in this scoping review, the EBSCO database was searched for the years 2006 to 2018. Initial search terms included "health equity/disparity," "immigrant/immigration," "community and individual well-being (including young and elders)," "health equity framework," and "Latino, Asian, refugee, undocumented communities." After preliminary reviews of search results, the authors decided to prioritize reviewing results from 2011 to 2018 so that the majority of the results would be relevant to questions of health and health care access after the Affordable Care Act of 2010. Next, the bibliographies of the articles were assessed to identify additional sources to review. Both backward reference searching, in which the reference list from one article is reviewed to identify additional articles for review, and forward reference searching, in which articles that cite the initial article of interest are identified, were used (Florida Atlantic University Libraries, n.d.). Articles were included if they were written in English.

Analogous to Arksey and O'Malley's (2005) stage of "charting the data," a literature review matrix was developed with key categories such as author(s), purpose of study, methodology used, study populations included, and results. Each source was entered into the matrix.

Approximately 75 articles and papers were identified and evaluated as part of the overall review. Through the process of summarizing and reporting on the results (Arksey & O'Malley, 2005), the authors identified a subset of 28 sources—including reviews, commentaries, and original studies—that highlighted mental health and well-being as a main theme in the literature. Within this theme, many of the articles discussed the unique mental health challenges of young adults and adolescents with immigrant backgrounds, as well as opportunities for strengths-based approaches to working with young people. Please see Table 1 for a summarized version of the literature review matrix that reports findings from a further subset of 14 articles that specifically reported on quantitative or qualitative studies with implications for the mental health and well-being of immigrant populations in the United States.

RESULTS

Disparities in Mental Health Service Use Among **Immigrant Populations in the United States**

As mentioned above, this scoping review included a variety of data sources, including published literature reviews, qualitative and quantitative studies, and commentaries. This literature identified intersections between immigration and risk of mental health challenges due to factors both before and after immigration, including experiences of war, other types of direct violence and/ or trauma, economic challenges, separation from family and social networks, as well as racism and discrimination (Castañeda et al., 2015; Derr, 2016; García, 2012; Hall & Cuellar, 2016; J. Kim et al., 2012; Lazarevic, 2017; Majumdar & Martínez-Ramos, 2016; Martinez et al., 2015; Morey, 2018; Patler & Laster Pirtle, 2017; D. X. Rodriguez, McDaniel, & Bisio, 2019; D. X. Rodriguez, Rodriguez, & Zehyoue, 2019; S. C. Rodriguez & Rodriguez, in press; Siemons et al., 2017). The literature also identified heightened anxiety among immigrants and their families due to the risk of deportation of themselves and/ or family members as a possible stressor (Cohen et al., 2017; Majumdar & Martínez-Ramos, 2016; Patler & Laster Pirtle, 2017; Siemons et al., 2017; Vargas et al., 2017; Vargas & Ybarra, 2017).

Scholars argue that immigration itself can be considered a social determinant of health, or a social factor that affects health outcomes for a variety of reasons (Castañeda et al., 2015; Ko Chin, 2018; Morey, 2018; Patler & Laster Pirtle, 2017). First, different immigration classifications are associated with eligibility for different types of benefits. Also, immigration can be considered a social determinant of health because of the intersection between immigration status and other factors like living

(continued)

TABLE 1
Select Scoping Review Findings: Quantitative and Qualitative Studies With Implications for the Mental Health and Well-Being of Immigrant
Populations in the United States

			do	opmarions in the control
Author(s) and year	$Study\ type$	Sample size	Geographic scope	Findings and conclusions
1. G. Kim et al. (2011)	Quantitative	N = 372	National	This study analyzed responses to the National Latino and Asian American Study from 2002/2003 for a subset of adult immigrant participants who reported a probable psychiatric disorder. The authors explored the relationship between limited English proficiency and the use of mental health services. The study found that while all of the participants reported indications of psychiatric disorders, only 19.4% reported using mental health services in the past year. Reporting lower English-speaking skills was significantly associated with lower odds of mental health service use for the overall sample and for Latino/a immigrants, though it was not significant for Asian immigrants, who were less likely to access services overall.
2. J. Kim et al. (2012)	Qualitative	N = 15	Northeastern region	The purpose of the study was to explore adolescent Korean immigrants' experiences with acculturation stress in the United States, as well as to understand the coping strategies they employed in response. The study found that participants reported experiencing stress related to acculturation. The authors identified three main categories of coping strategies that participants employed: (1) participating in activities they found meaningful; (2) social support, especially friendships with other Korean immigrant students and/or other immigrant students from Asia; and (3) focusing on positive emotions. Participants reported heightened positive emotions and self-agency from recognizing that they had the ability to overcome challenges.
3. Lazarevic (2017)	Quantitative	N = 197	Online survey (specific region not indicated)	The purpose of this study was to explore the effects that cultural brokering, or helping one's parents navigate aspects of living in the United States, had on the well-being and overall family dynamics of Eastern European immigrants and refugees to the United States, aged 18–28. Through an online survey, the author found an association between young people's negative feelings toward language brokering for their parents and their experiences of depression, though family conflict mediated this relationship. The author argues that findings support theories that negative associations with language brokering may increase family conflict, which then influences depression among immigrant youth.
4. Lee & Matejkowski (2012)	Quantitative	N = 4,226	National	This study analyzed responses from participants aged 18 –64 in the National Latino and Asian American Study from 2002 – 2003 . Its purpose was to examine the relationship between citizenship status and rates of mental health service use among respondents, specifically to compare the rates of utilization between U.Sborn citizens ($n = 1,473$), naturalized U.S. citizens ($n = 1,309$), and noncitizens ($n = 1,444$). It found that among participants, naturalized U.S. citizens and noncitizens were approximately 40% less likely to use mental health services as compared to U.Sborn citizens.
5. Majumdar & Martínez- Ramos (2016)	Quantitative	N=1,726	National	This study analyzed data from the 2008 National Survey of Latinos from the Pew Hispanic Center. Its purpose was to determine if there was an association between reported perceptions of anti-immigration environments and reported indicators of happiness/well-being among Latinos/as sampled. The authors also compared responses from Latinos/as of Mexican descent to responses from Latinos/as of non-Mexican descent. The study found that respondents had greater odds of reporting being unhappy if they also reported experiencing discrimination in housing, discrimination in employment, and worries about deportation, and that this effect was more pronounced for Latinos/as of Mexican descent than for other respondents. The authors also found a significant relationship between reported worries of deportation and experiences of discrimination and the odds of reporting dissatisfaction among Latinos/as of Mexican descent but did not find a similar relationship for other Latino/a respondents.

TABLE 1 (CONTINUED)

Author(s) and year	$Study\ type$	Sample size	Geographic scope	Findings and conclusions
6. Patler & Laster Pirtle (2017)	Quantitative	N = 487	California	This study analyzed data from the DACA Study from 2014–2015 to explore how changes in immigration status affected Latino/a immigrants' mental health and well-being. The study asked respondents to report their psychological wellness related to three variables—experiencing distress, experiencing negative feelings, and having concern about deportation—at two points in time: during the previous year or in the year before receiving DACA, and at the time of the study. The authors then compared the responses from Latino/a youth who had DACA protections to responses from Latino/a youth who did not. Analysis of respondents' retrospective reports found that socioeconomic status primarily predicted psychological wellness at the time of the study. The authors found that significantly fewer respondents who were DACA recipients reported psychological distress in the past 30 days as compared with respondents who did not have DACA protections. A measure that was not significantly different between the two groups was the likelihood of reporting concern for the deportation of a family member.
7. D. X. Rodriguez, McDaniel, & Bisio (2019)	Qualitative	N = 1	Georgia	The purpose of this study was to examine the case of Freedom University, an underground school of higher education for undocumented students in Georgia. The authors explored how the school functions as a space of care outside of, and in opposition to, formal legal frameworks. The authors conclude that Freedom University grew out of the historical precedents of African American Freedom Schools and schools in the Chicano movement. They write that it is a contemporary example of a space of care outside of formal legal structures. The authors argue that Freedom University serves as a literal and metaphorical bridge between people who live in close geographic proximity to each other but may not interact frequently and/or may experience different types of marginalization due to state and federal policies.
8. D. X. Rodriguez, Rodriguez, & Zehyoue (2019)	Qualitative	N = 50	National	This study's authors analyzed videos that DACA recipients posted to social media in 2017–2018 about their immigration advocacy experiences. The authors identified two main themes from the DACA recipients video narratives: (1) intensified activism and political engagement around DACA and other immigration issues and (2) leadership in community mobilization around these topics. The authors found that DACA youth used social media as a tool for creating and activating social capital and social networks. The authors concluded that such narratives provide examples of the valuable assets DACA youth contribute to their communities, and also provide counternarratives to negative portrayals of immigrants in the media.
9. S. C. Rodriguez & Rodriguez (in press)	Qualitative	N = 3	Georgia	This study applied Latino critical race theory to understand the experiences of Latina college students with DACA status during a time of amplified uncertainty regarding DACA's continuation in 2018. The authors found that the most prominent themes reported were that participants were highly selective in their disclosure of their status, that they lived with a sense of uncertainty, and that they did not want to be pitied or for others to feel sorry for them.
10. Siemons et al. (2017)	Qualitative	N = 61	California	The purpose of the study was to better understand DACA's impact on the mental health and well-being of DACA-eligible Latinos/as aged 18–31. Focus groups were conducted in Los Angeles and the San Francisco Bay area in 2013. The authors found that participants described DACA as supporting their health and well-being in the following ways: improving their economic opportunities, improving their self-confidence and sense of belonging, and promoting support networks between peers. However, participants also reported that DACA introduced new stresses related to family responsibilities, and they experienced continued fear of deportation of family members.

TABLE 1 (CONTINUED)

Author(s) and year	Study type	Sample size	Geographic scope	Findings and conclusions
11. Sudhinaraset et al. (2017)	Qualitative	N = 32	California	The purpose of this study conducted in 2015–2016 was to explore ways that DACA influenced ideas and experiences of health and well-being for undocumented Asians and Pacific Islanders, aged 18–31. In particular, the authors used a social determinants of health framework to understand DACA's relationships to health. The authors found that DACA positively influenced the mental health and well-being of participants through increased financial stability, increased options for education, social benefits, and increased access to health care due to less fear of deportation. However, findings also indicated that some respondents reported continued concern for noneligible family members, and some respondents considered DACA to be a cause of divisions within Asian and Pacific Islander communities, particularly between DACA-eligible individuals and members of the community who were not eligible for DACA protections.
12. Vargas et al. (2017)	Quantitative	N = 1,200	National	This study examines the association between state-level policies punitive toward immigrants from 2005–2011from the National Conference of State Legislatures and self-reported health among Latino/a respondents from the 2011 Latino Decisions/ImpreMedia telephone survey. The authors found that living in a state with a high number of immigration-related laws decreased the odds that Latinos/as reported optimal health. The authors also report that their model did not find differences in reported health between citizens and noncitizens.
13. Vargas & Ybarra (2017)	Quantitative	N = 1,493	National, including Puerto Rico	Using data from the 2015 Latino National Health and Immigration Survey, this study analyzed the relationship between Latino/a parents' citizenship/immigration status and their reports of their child's health status, as well as the parents' perception of their state's attitude toward immigrants, as represented through immigration-related policies, and parental reports of their child's health status. The authors found that for families in which at least one parent was not a U.S. citizen or legal permanent resident (i.e., families in which at least one parent was undocumented), parents were less likely to report optimal health for their child as compared to other families in the sample. The authors also found that parents who reported their state as unfavorable toward immigrants had lower odds of reporting optimal child health. The authors argue that such findings indicate health disparities for children with at least one undocumented parent, as well as associations between immigration policies and child health.
14. Venkataramani et al. (2017)	Quantitative	N = 14,973 for self- reported health outcomes; $N =$ 5,035 for self- reported psychological distress outcomes	National	This study used data from the U.S. National Health Interview Survey from January 2008 to December 2015 to assess the physical health and mental health impact of DACA among a subset of noncitizen, Latino/a respondents, aged 19–50. The study used a retrospective, quasi-experimental design to compare the overall health and presence of psychological distress between older (i.e., not DACA-eligible) and younger (i.e., DACA-eligible) respondents. The study found no difference in self-reported overall health between younger and older respondents. However, the authors found that after DACA went into effect, younger, likely DACA-eligible, respondents were significantly less likely to report experiencing moderate or worse psychological distress in the past 30 days than older respondents.

Note. DACA = Deferred Action for Childhood Arrivals.

and working circumstances, as well as enforcement activities such as detention and deportation (Castañeda et al., 2015; Ko Chin, 2018; Martinez et al., 2015; Morey, 2018). Scholars argue that when such laws systemically exclude certain racialized groups—such as various immigrant populations—from accessing health services needed to attain health outcomes similar to those of other populations, they function as forms of structural racism that affect the distribution of resources and lead to health disparities (Gee & Ford, 2011; Ko Chin, 2018; Morey, 2018; Patler & Laster Pirtle, 2017). Laws at the state and local levels that introduce punitive measures for renting to or employing unauthorized immigrants, as well as laws that require local law enforcement to inquire about immigration status, have raised concerns about racial profiling and inequitable treatment of racial/ethnic minorities, particularly of Latinos/as (Gee & Ford, 2011; Majumdar & Martínez-Ramos, 2016; Vargas et al., 2017).

Given significant need among immigrant populations, disparities in use of mental health services raise questions related to equity of access and utilization. A systematic review by Derr (2016) focused on studies about mental health care services use of immigrant populations in the United States. Derr found that limitations in health care system capabilities—such as those related to language barriers and lack of cultural competency by providers—were structural barriers to care. Derr also identified immigrants' cultural stigma of mental health conditions, fear of deportation, the high cost of services, lack of insurance, lack of knowledge about services, and communication challenges as barriers to care. Derr concluded that across the 62 articles included in that review, "A consistent finding was that immigrants access mental health services at lower rates than nonimmigrants" and that in general the studies showed that undocumented status, being male, youth, and being uninsured correlated with low rates of access (p. 270).

Further examination of two studies included in Derr's (2016) review highlights specific disparities in mental health service access. For example, Lee and Matejkowski (2012) analyzed data from the National Latino and Asian American Study from 2002–2003 and found that among adult respondents aged 18 to 64, naturalized citizens and noncitizens were approximately 40% less likely to use mental health services as compared to U.S.-born citizens. Utilizing data from the same survey but sampling only adult immigrant respondents who reported a probable psychiatric disorder (i.e., anxiety disorder, mood disorder and/or substance use disorder), G. Kim et al. (2011) found that only 19.4% of respondents reported use of mental health services in the past 12 months.

Impact of Immigration Laws on Mental Health of Immigrant Populations

Martinez et al. (2015) conducted a systematic review of immigration policies from several countries and their impact on the health of undocumented immigrants. Out of the 40 peer-reviewed articles Martinez et al. reported on, 10 addressed health outcomes, and the authors report that a majority of these articles found that anti-immigrant policies were associated with mental health outcomes specifically, including anxiety, depression, and posttraumatic stress disorder.

Other studies in this scoping review also found associations between immigration policies and the overall health and well-being of immigrant populations across immigration status classifications (Majumdar & Martínez-Ramos, 2016; Vargas et al., 2017; Vargas and Ybarra, 2017). For example, in a study of Latinos/as living in the United States that included both immigrants and nonimmigrants, Majumdar and Martínez-Ramos (2016) found that respondents had greater odds of reporting being unhappy if they also reported experiencing discrimination in housing, discrimination in employment, and worries about deportation. Majumdar and Martínez-Ramos reported that this effect was more pronounced for Latinos/as of Mexican descent than for other respondents. Analyzing data from the 2011 Latino Decisions/ImpreMedia survey developed by the Robert Wood Johnson Foundation and the University of New Mexico, and cross-referencing it with immigration legislation data from the National Conference of State Legislators from 2005-2011, Vargas et al. (2017) found that living in a state with a high number of immigrationrelated laws decreased the odds that Latino/a citizens and noncitizens reported optimal health. Vargas and Ybarra (2017) analyzed data from the 2015 Latino National Health and Immigration Survey and compared parental reports of child health status across three different groups of families: families in which the parent is undocumented and the child is a U.S. citizen, families in which the parent is a Legal Permanent Resident and the child is a U.S. citizen, and families in which the parent and child are both U.S. citizens. Vargas and Ybarra found that for families in which the responding parent was undocumented, parents were less likely to report optimal health for their child as compared to other families in the sample. The authors also found that parents who reported their state as unfavorable toward immigrants had lower odds of reporting optimal child health. Vargas and Ybarra argued that such findings indicate health disparities for children with at least one undocumented parent, as well as associations between immigration policies and child health.

While these studies focused on samples of Latino/as living in the United States, their findings suggest that punitive immigration laws may also impact the health and well-being of diverse racial and ethnic populations who experience marginalization. Additional research with diverse racial and ethnic communities is necessary to better understand the full impact of such legislative measures.

Mental Health Considerations for Adolescent and Young Adult Immigrants

Adolescent and young adult immigrants to the United States may face multiple stressors related to loss of family networks, traumatic experiences, language barriers, racial discrimination, and pressures to acculturate (J. Kim et al., 2012; Lazarevic, 2017; Siemons et al., 2017; D. X. Rodriguez, Rodriguez, & Zehyoue, 2019; S. C. Rodriguez & Rodriguez, in press). For example, immigration experiences may lead to intergenerational stress between young people and their parents; such stress may be particularly salient if young people adapt to U.S. culture more quickly than their parents, or if they adopt different cultural norms and expectations from their parents (J. Kim et al., 2012; Lazarevic, 2017; D. X. Rodriguez, Rodriguez, & Zehyoue, 2019).

However, research regarding Deferred Action for Childhood Arrivals (DACA) suggests that some types of government policies can have positive impacts on the mental health and well-being of immigrant populations. DACA was an executive order issued in 2012 that granted specific legal protections for certain groups of unauthorized immigrants who came to the United States as children, including temporary respite from deportation, work authorization, and eligibility for identification such as a driver's license (Patler & Laster Pirtle, 2017; Siemons et al., 2017; Sudhinaraset et al., 2017; Venkataramani et al., 2017).

Venkataramani et al. (2017) analyzed data from the U.S. National Health Interview Survey from January 2008 to December 2015 for a subset of Latino/a adults who were not U.S. citizens to compare the self-reported health between older (i.e., not DACA eligible) and younger (i.e., DACA eligible) respondents. Though the National Health Interview Survey did not include data about immigration status, the authors estimated respondents' age at time of immigration and age when DACA was introduced to approximate which respondents were DACA eligible. Venkataramani et al. (2017) found no difference in selfreported overall health between younger and older respondents. However, their analysis found that after DACA went into effect, younger, likely DACA-eligible,

respondents were significantly less likely to report experiencing moderate or worse psychological distress in the past 30 days than older respondents (Venkataramani et al., 2017).

Similarly, Patler and Laster Pirtle (2017) analyzed data from the DACA Study in 2014 and 2015, which sampled Latino/a immigrants aged 18 to 34 years living in California. The study asked respondents to rate their psychological well-being at two points in time: during the previous year or in the year before receiving DACA, and at the time of the study. Patler and Laster Pirtle then compared the responses from Latino/a youth who had DACA protections to responses from Latino/a youth who did not. Respondents' retrospective reports found that socioeconomic status was the primarily predictor of psychological well-being before DACA, but at the time of the study, DACA status was the primary predictor of respondents' reported psychological wellness (Patler & Laster Pirtle, 2017). The authors found that significantly fewer respondents who were DACA recipients reported psychological distress in the past 30 days as compared with respondents who did not have DACA protections. A measure that was not significantly different between the two groups after DACA was the likelihood of reporting concern for the deportation of a family member (Patler & Laster Pirtle, 2017).

The findings of the above quantitative studies align with findings from two qualitative studies with DACA-eligible young people that were included in this review. Siemons et al. (2017) conducted focus groups with DACA-eligible Latinos/as aged 18 to 31 in California and found that participants thought DACA improved their economic opportunities and promoted support networks between peers; however, the authors concluded that the "transfer of worry from their own survival to their families" because of DACA "had mental health consequences" (p. 547). Sudhinaraset et al. (2017) reported similar findings among Asians and Pacific Islanders aged 18 to 31 in California, who described that DACA had positively influenced their mental health and well-being through increased financial stability, increased options for education, social benefits, and increased access to health care due to less fear of deportation. However, Sudhinaraset et al. also found that some respondents said that they continued to be concerned for non-DACA-eligible family members; additionally, some respondents reported that DACA caused divisions within Asian and Pacific Islander communities, particularly between DACA-eligible individuals and members of the community who were not eligible for DACA protections.

Strengths-Based Approaches to Address Mental Health Needs Among Immigrant Communities

In addition to the mental health disparities and barriers to care outlined above, the literature included in this scoping review also presented examples of initiatives working in partnership with immigrant communities to develop strengths-based approaches to promoting positive mental health and well-being. For example, Welcoming America is a national nonprofit that seeks to support positive interactions and outcomes for newly arrived immigrants and longer term residents of local communities (D. X. Rodriguez et al., 2018). In their report for Welcoming America titled Pursuing Health Equity Through Welcoming Work, Mayer and Driver (2016) outlined six recommendations for communities working to promote health equity and support the health and well-being of immigrant residents. These include using participatory research approaches, ensuring immigrants have decision-making roles in health programs and other initiatives, and assuring access to health care services across racial, economic, cultural, or language backgrounds (Mayer & Driver, 2016).

Studies of adolescent and young adults with immigrant and refugee backgrounds also emphasized the value of strengths-based approaches (Edberg et al., 2017; J. Kim et al., 2012). For example, Edberg et al. (2017) described Adelante, a Positive Youth Development Program. According to the authors, *Adelante* seeks to enhance individual-level knowledge and use of healthpromoting behaviors, community-level social networks, and employment opportunities for young people, all of which are factors that the designers of the program hypothesized would support individual and community health and well-being (Edberg et al., 2017). Such approaches may correspond with—and build on—relationships and social networks that already exist within immigrant communities. For example, in interviews with adult Bangladeshi immigrants living in New York City, Dutta and Jamil (2013) found that participants considered caring for their own health as closely tied to caring for the health needs of others in their social networks. Similarly, in interviews with Korean adolescents living in the United States, J. Kim et al. (2012) found that respondents considered their peer networks with other immigrant students and family relationships as important positive supports for their overall mental health and well-being. They also found that participants reported heightened positive emotions and selfagency due to the realization that even though they faced significant difficulties living in their new environments, they had the strength and ability to overcome these challenges (J. Kim et al., 2012)

DISCUSSION

This scoping review was conducted during the summer of 2019, at a time of considerable changes to national immigration policy in the United States. For example, after the government attempted to rescind DACA in 2017, in early 2018 several federal courts ordered the government to continue accepting renewal applications, though USCIS stopped accepting applications from individuals who were not previously granted DACA protections (UCIS, 2019). Then in August 2019, the U.S. Department of Homeland Security issued the final rule regarding Inadmissibility on Public Charge Grounds, under which the government can deny visas and lawful permanent resident status to noncitizens deemed likely to use public benefits in the future, or who had used public benefits for more than 12 months within any 36-month period while residing in the United States (USCIS, 2020). Also during 2019, the Trump Administration began enforcing new Migrant Protection Protocols, under which asylum seekers who crossed the Mexico/U.S. border without authorization were sent back across this border to wait for their asylum claims to be processed in Mexico (U.S. Department of Homeland Security, 2019).

While some of these policies directly affected immigrants already living in the United States and others focused on individuals and families attempting to enter the country, the findings of this scoping review point to ways that their impact is not limited to such distinctions but rather can influence the mental health of immigrants of diverse legal classifications, their families, and their wider communities. Therefore, framing immigration as a social determinant of health underscores the unique mental health stressors that immigrants and their social networks face.

Recognizing this complexity, researchers and practitioners working to support mental health and well-being among immigrant populations must be cognizant and responsive to the particular contexts in which they work. D. R. Williams and Purdie-Vaughns (2016) call on researchers to distinguish between diverse marginalized groups, recognizing that "historical factors and a range of contextual factors" can create vastly different outcomes (p. 640). With this understanding in mind, future research must continue to consider specific social, economic, and historical experiences of different immigrants and immigrant communities, as well as the ways factors such as nationality, race/ethnicity, age, socioeconomic status, immigration status, and laws and policies in a particular locale affect health outcomes before and after immigration. In particular, additional research across a larger diversity of racial/ethnic groups is necessary to have a more comprehensive picture of the health needs and strengths of immigrant communities in the United States. Therefore, while this scoping review summarizes a broad range of literature describing the mental health needs and current programs regarding immigrant populations in the United States, addressing such needs will require unique interventions developed in partnership with communities.

This need for specificity is related to a limitation of this review, which is that while the included studies provide information on specific populations and geographic locations within the United States, broad conclusions are difficult to draw. The intersections of immigration and mental health include complex relationships between social determinants such as immigration status, citizenship status, race/ethnicity, gender, age, laws, and other factors. Some studies analyzed outcomes for samples that included only immigrant populations but included respondents across racial/ethnic groups and/or countries of origin. Other studies analyzed samples that included both immigrant and nonimmigrant participants, but the participants were from the same racial/ethnic group (e.g., noncitizen immigrants and their children who are U.S. citizens). Such differences in sample populations make comparisons across studies difficult. At the same time, such complexity and fluidity represent the conditions in which people live their lives and experience mental health and well-being.

Finally, though this review was conducted in summer 2019, which was before the first case of coronavirus disease 19 (COVID-19) was reported in the United States (Holshue et al., 2020), the authors would be remiss not to acknowledge that as of late May 2020, the Centers for Disease Control and Prevention (2020) has reported data that reflect disproportionately high incidents of COVID-19 among racial and ethnic minority populations. A systematic review of COVID-19's full impact on immigrant populations in the United States is outside the scope of this project. However, the current data have prompted medical and public health leaders to emphasize the ways COVID-19 has underscored existing racial and ethnic inequities in the U.S. health care system and society more broadly (Choo, 2020; Hartman & Zylla, 2020; Page et al., 2020; van Dorn et al., 2020; T. T. Williams, 2020). More research will be necessary to more fully understand the impact of COVID-19 on immigrant communities, including its effects on mental health and well-being.

CONCLUSION

This scoping literature review explored findings from published research studies and practitioner-focused gray literature about the mental health needs of immigrant populations in the United States, as well as strengthsbased approaches to working with immigrant communities to support mental health and well-being. The studies included in this review suggest that immigrant populations have distinct mental health needs, and that disparities exist in their access to mental health services as compared to nonimmigrant groups. Specific mental health needs, as well as barriers and bridges to care, vary across factors like age, racial/ethnic group, immigration status, and location within the United States. However, studies suggest that punitive immigration laws may have negative impact on the health and well-being of immigrant populations and their communities. Additionally, youth and young adult immigrants may experience unique stressors related to their developmental stage.

Findings from the review indicate the strong need for a better understanding of the mental health needs and current barriers to care among diverse immigrant populations as immigration continues to play a major role in U.S. public policy and discourse. These findings regarding issues of mental health and well-being, particularly for vulnerable and marginalized populations such as immigrant populations, are even more pronounced when considering the COVID-19 pandemic that is occurring as this article went to press in 2020, signaling the need for further interdisciplinary research to assess intersections among the pandemic's many impacts. Initiatives to foster positive mental health and well-being among immigrant communities must consider how to work in partnership with local residents to better understand their mental health needs and to learn how existing community strengths and resources may be engaged.

ORCID iD

Darlene Xiomara Rodriguez Dhttps://orcid.org/0000-0001-6627-

REFERENCES

Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. International Journal of Social Research Methodology, 8(1), 19-32. https://doi.org/10.1080/136455703200 0119616

Castañeda, H., Holmes, S. M., Madrigal, D. S., Young, M. D., Beyeler, N., & Quesada, J. (2015). Immigration as a social determinant of health. Annual Review of Public Health, 36(1), 375-392. https://doi.org/10.1146/annurev-publhealth-032013-182419

Centers for Disease Control and Prevention. (2020). Coronavirus disease 2019 (COVID-19): Cases in the U.S. https://www.cdc.gov/ coronavirus/2019-ncov/cases-updates/cases-in-us.html

Choo, E. K. (2020). COVID-19 fault lines. The Lancet, 395(10233), 1333. https://doi.org/10.1016/S0140-6736(20)30812-6

Cohen, A. B., Grogan, C. M., & Horwitt, J. N. (2017). The many roads toward achieving health equity. Journal of Health Politics, Policy and Law, 42(5), 739-748. https://doi.org/10.1215/03616878-3940414

Derr, A. S. (2016). Mental health service use among immigrants in the United States: A systematic review. Psychiatric Services, 67(3), 265-274. https://doi.org/10.1176/appi.ps.201500004

Diaz, E., Ortiz-Barreda, G., Ben-Shlomo, Y., Holdsworth, M., Salami, B., Rammohan, A., Chung, R. Y., Padmadas, S. S., & Krafft, T. (2017). Systematic review and meta-analyses interventions to improve immigrant health. A scoping review. European Journal of Public Health, 27(3), 433-439. https://doi.org/10.1093/eurpub/

Dutta, M., & Jamil, R. (2013). Health at the margins of migration: $Culture\text{-}centered\ co\text{-}constructions\ among\ Bangladeshi\ immigrants.$ Health Communication, 28(2), 170-182. https://doi.org/10.1080/1 0410236.2012.666956

Edberg, M. C., Cleary, S. D., Andrade, E. L., Evans, W. D., Simmons, L. K., & Cubilla-Batista, I. (2017). Applying ecological positive youth development theory to address co-occurring health disparities among immigrant Latino youth. Health Promotion Practice, 18(4), 488-496. https://doi.org/10.1177/1524839916638302

Florida Atlantic University Libraries. (n.d.). Guide to science information resources: Backward & forward reference searching. https:// libguides.fau.edu/c.php?g=325509&p=2182112

Furuseth, O., Smith, H., & McDaniel, P. N. (2015). Belonging in Charlotte: Multiscalar differences in local immigration politics and policies. Geographical Review, 105(1), 1-19. https://doi. org/10.1111/j.1931-0846.2014.12048.x

García, J. I. R. (2012). Mental health care for Latino immigrants in the U.S.A. and the quest for global health equities. Psychosocial Intervention, 21(3), 305-318. https://doi.org/10.5093/in2012a27

Garfield, R., Orgera, K., & Damico, A. (2019). The uninsured and the ACA: A primer. Kaiser Family Foundation. https://www.kff. org/uninsured/report/the-uninsured-and-the-aca-a-primer-keyfacts-about-health-insurance-and-the-uninsured-amidst-changesto-the-affordable-care-act/

Gee, G. C., & Ford, C. L. (2011). Structural racism and health disparities. Du Bois Review-Social Science Research on Race, 8(1), 115-132. https://doi.org/10.1017/S1742058X11000130

Hacker, K., Anies, M., Folb, B. L., & Zallman, L. (2015). Barriers to health care for undocumented immigrants: A literature review. Risk Management and Healthcare Policy, 8, 175-183. https://doi. org/10.2147/RMHP.S70173

Hall, E., & Cuellar, N. G. (2016). Immigrant health in the United States: A trajectory toward change. Journal of Transcultural Nursing, 27(6), 611. https://doi.org/10.1177/1043659616672534

Hartman, L., & Zvlla, E. (2020). States' reporting of COVID-19 health equity data. https://www.shvs.org/states-reporting-ofcovid-19-health-equity-data/

Holshue, M. L., DeBolt, C., Lindquist, S., Lofy, K. H., Wiesman, J., Bruce, H., Spitters, C., Ericson, K., Wilkerson, S., Tural, A., Diaz, G., Cohn, A., Fox, L., Patel, A., Gerber, S. I., Kim, L., Tong, S., Lu, X., Lindstrom, S., . . . the members of Washington State 2019-nCoV Case Investigation Team. (2020). First case of 2019 novel coronavirus in the United States. New England Journal of Medicine, 382(10), 929-936. https://doi.org/10.1056/NEJMoa2001191

Kim, G., Aguado Loi, C. X., Chiriboga, D. A., Jang, Y., Parmelee, P., & Allen, R. S. (2011). Limited English proficiency as a barrier to mental health service use: A study of Latino and Asian immigrants with psychiatric disorders. Journal of Psychiatric Research, 45(1), 104-110. https://doi.org/10.1016/j.jpsychires.2010.04.031

Kim, J., Suh, W., Kim, S., & Gopalan, H. (2012). Coping strategies to manage acculturative stress: Meaningful activity participation, social support, and positive emotion among Korean immigrant adolescents in the USA. International Journal of Qualitative $Studies \, on \, Health \, and \, Well\text{-}Being, \, 7, \, 1\text{--}10. \, https://doi.org/10.3402/$ qhw.v7i0.18870

Ko Chin, K. (2018). Immigration as a social determinant of health. http://www.gih.org/Publications/ViewsDetail.cfm?Item Number=9331

Lazarevic, V. (2017). Effects of cultural brokering on individual wellbeing and family dynamics among immigrant youth. Journal of Adolescence, 55, 77-87. https://doi.org/10.1016/j.adolescence.2016.12.010

Lee, S., & Matejkowski, J. (2012). Mental health service utilization among noncitizens in the United States: Findings from the national Latino and Asian American study. Administration and Policy in Mental Health, 39(5), 406-418. https://doi.org/10.1007/ s10488-011-0366-8

Majumdar, D., & Martínez-Ramos, G. P. (2016, August 20-23). The impact of anti-immigrant environment on well-being of Latinos of Mexican descent in the US [Paper presentation]. American Sociological Association 111th Annual Meeting, Seattle, WA, United States. https://www.asanet.org/news-events/meetings/ previous-annual-meetings

Martinez, O., Wu, E., Sandfort, T., Dodge, B., Carballo-Dieguez, A., Pinto, R., Rhodes, S. D., Moya, E., & Chavez-Baray, S. (2015). Evaluating the impact of immigration policies on health status among undocumented immigrants: A systematic review. Journal of Immigrant and Minority Health, 17(3), 947-970. https://doi. org/10.1007/s10903-013-9968-4

Mayer, M., & Driver, J. (2016). Pursuing health equity through welcoming work. Welcoming America. https://www.welcomingamerica.org/sites/default/files/WA Health%20White%20Paper D.pdf

McDaniel, P. N. (2018). Shared humanity, city branding, and municipal immigrant integration initiatives in the southeastern United States. Southeastern Geographer, 58(3), 250-281. https:// doi.org/10.1353/sgo.2018.0028

McDaniel, P. N., Rodriguez, D. X., & Krumroy, J. (2019). From municipal to regional immigrant integration in a major emerging gateway: Planning a Welcoming Metro Atlanta. Papers in Applied Geography, 5(1-2), 140-165. https://doi.org/10.1080/23754931.20 19.1655783

McDaniel, P. N., Rodriguez, D. X., & Wang, Q. (2019). Immigrant integration and receptivity policy formation in Welcoming Cities. Journal of Urban Affairs, 41(8), 1142-1166. https://doi.org/10.108 0/07352166.2019.1572456

McDaniel, P. N., & Smith, H. A. (2017). Receptivity's construction in public schools: A component of immigrant integration in an emerging gateway. Journal of International Migration and Integration, 18(4), 1061-1081. https://doi.org/10.1007/s12134-017-0522-4

McDaniel, P. N., Rodriguez, D. X., & Kim, A. J. (2017). Receptivity and the Welcoming Cities movement: Advancing a regional immigrant integration policy framework in metropolitan Atlanta, Georgia. Papers in Applied Geography, 3(3-4), 355-379. https:// doi.org/10.1080/23754931.2017.1367957

- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA statement. Public Library of Science. https://doi. org/10.1371/journal.pmed.1000097
- Morey, B. N. (2018). Mechanisms by which anti-immigrant stigma exacerbates racial/ethnic health disparities. American Journal of Public Health, 108(4), 460-463. https://doi.org/10.2105/AJPH. 2017.304266
- Page, K. R., Venkataramani, M., Beyrer, C., & Polk, S. (2020). Undocumented U.S. immigrants and COVID-19. New England Journal of Medicine, 382(21), e62. https://doi.org/10.1056/NEJMp 2005953
- Patler, C., & Laster Pirtle, W. (2017). From undocumented to lawfully present: Do changes to legal status impact psychological wellbeing among Latino immigrant young adults? Social Science & Medicine, 199, 39-48. https://doi.org/10.1016/j.socscimed.2017.
- Radford, J. (2019). Key findings about U.S. immigrants. Pew Research Center. https://www.pewresearch.org/fact-tank/2019/ 06/03/key-findings-about-u-s-immigrants/
- Rodriguez, D. X., & McDaniel, P. N. (2019). Community-based participatory research as a tool for improved understanding and practice of newcomer integration. Journal of Higher Education Outreach and Engagement, 23(2), 3-19. https://files.eric.ed.gov/fulltext/ EJ1229759.pdf
- Rodriguez, D. X., McDaniel, P. N., & Ahebee, M.-D. (2018). Welcoming America: A case study of municipal immigrant integration, receptivity, and community practice. Journal of Community Practice, 26(3), 348-357. https://doi.org/10.1080/10705422.2018. 1477081
- Rodriguez, D. X., McDaniel, P. N., & Bisio, G. (2019). "FU": One response to the liminal state immigrant youth must navigate. Law & Policy, 41(1), 59-79. https://doi.org/10.1111/lapo.12117
- Rodriguez, D. X., Rodriguez, S. C., & Zehyoue, B. C. V. (2019). A content analysis of the contributions in the narratives of DACA youth. University Library System, University of Pittsburgh. https:// doi.org/10.5195/jyd.2019.682
- Rodriguez, S. C., & Rodriguez, D. X. (in press). DACAmentation and achieving a college education: The challenge of being Latina. Peace and Conflict: Journal of Peace Psychology, 26.
- Shor, E., Roelfs, D., & Vang, Z. M. (2017). The "Hispanic mortality paradox" revisited: Meta-analysis and meta-regression of lifecourse differentials in Latin American and Caribbean immigrants' mortality. Social Science & Medicine, 186, 20-33. https://doi. org/10.1016/j.socscimed.2017.05.049
- Siemons, R., Raymond-Flesh, M., Auerswald, C., & Brindis, C. (2017). Coming of age on the margins: Mental health and wellbeing among Latino immigrant young adults eligible for Deferred Action for Childhood Arrivals (DACA). Journal of Immigrant and Minority Health, 19(3), 543-551. https://doi.org/10.1007/s10903-016-0395-1
- Stimpson, J. P., & Wilson, F. A. (2018). Medicaid expansion improved health insurance coverage for immigrants, but disparities persist. Health Affairs, 37(10), 1656-1662. https://doi.org/10.1377/ hlthaff.2018.0181
- Stimpson, J. P., Wilson, F. A., Murillo, R., & Pagan, J. A. (2012). Persistent disparities in cholesterol screening among immigrants

- to the United States. International Journal for Equity in Health, 11(1), 22-25. https://doi.org/10.1186/1475-9276-11-22
- Sudhinaraset, M., To, T. M., Ling, I., Melo, J., & Chavarin, J. (2017). The influence of Deferred Action for Childhood Arrivals on undocumented Asian and Pacific Islander young adults: Through a social determinants of health lens. Journal of Adolescent Health, 60(6), 741-746 https://doi.org/10.1016/j.jadohealth.2017.01.008
- U.S. Census Bureau. (2019). Table 3.1. foreign-born population by sex, age, and world region of birth: 2018. https://www.census.gov/ data/tables/2018/demo/foreign-born/cps-2018.html
- U.S. Citizenship and Immigration Services. (2019). Deferred Action for Childhood Arrivals: Response to January 2018 preliminary injunction. https://www.uscis.gov/humanitarian/deferredaction-childhood-arrivals-response-january-2018-preliminaryinjunction
- U.S. Citizenship and Immigration Services. (2020). Public charge. https://www.uscis.gov/greencard/public-charge
- U.S. Department of Homeland Security. (2018). Definition of terms. https://www.dhs.gov/immigration-statistics/data-standards-anddefinitions/definition-terms#3
- U.S. Department of Homeland Security. (2019). Migrant protection protocols. https://www.dhs.gov/news/2019/01/24/migrant-protection-protocols
- van Dorn, A., Cooney, R. E., & Sabin, M. L. (2020). COVID-19 exacerbating inequalities in the US. The Lancet, 395(10232), 1243-1244. https://doi.org/10.1016/S0140-6736(20)30893-X
- Vargas, E. D., Sanchez, G. R., & Juárez, M. D. (2017). The impact of punitive immigrant laws on the health of Latina/o populations. Politics & Policy, 45(3), 312-337. https://doi.org/10.1111/ polp.12203
- Vargas, E. D., & Ybarra, V. (2017). U.S. citizen children of undocumented parents: The link between state immigration policy and the health of Latino children. Journal of Immigrant and Minority Health, 19(4), 913-920. https://doi.org/10.1007/s10903-016-0463-6
- Venkataramani, A. S., Shah, S. J., O'Brien, R., Kawachi, I., & Tsai, A. C. (2017). Health consequences of the US Deferred Action for Childhood Arrivals (DACA) immigration programme: A quasiexperimental study. The Lancet Public Health, (4), e175-e181. https://doi.org/10.1016/S2468-2667(17)30047-6
- Williams, D. R., & Purdie-Vaughns, V. (2016). Needed interventions to reduce racial/ethnic disparities in health. Journal of Health Politics, Policy and Law, 41(4), 627-651. https://doi.org///read. dukeupress.edu/jhppl/list-of-years
- Williams, T. T. (2020, April 17). COVID-19 and health equity: It's deeper than preexisting conditions. Public Health Newswire, American Public Health Association. http://www.publichealthnewswire.org/?p=covid-19-and-equity-1
- World Health Organization. (2018). Mental health: Strengthening our response. https://www.who.int/news-room/fact-sheets/detail/ mental-health-strengthening-our-response
- Yeo, Y. (2017). Healthcare inequality issues among immigrant elders after neoliberal welfare reform: Empirical findings from the United States. European Journal of Health Economics, 18(5), 547-565. https://doi.org/10.1007/s10198-016-0809-y