Latino Children at the Intersection of Immigration and Health Care Policy: A Mixed-methods Study of Parental Documentation Status, State-level Policy, and Access to Coverage and Care

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Dedication

This thesis is dedicated to *mi vida*, my light, Amalia Evelyn and children in immigrant families far and wide. Amalia, thank you for making me a mother and for reminding me on a daily basis that there is a greater end to this work. Your generation gives me hope for a more just future. My greatest wish is for your health and happiness. I love you, *te amo*.

Abstract

Purpose: Latino children experience the highest uninsurance rate among their peers and those with immigrant parents experience the greatest coverage disparities. Most (60%) of these 10 million children belong to mixed-status families in which parents and children have different documentation statuses that confer differential rights, benefits, and vulnerabilities. Immigrant adults face significant restrictions on public coverage, and barriers created by documentation status suggest that policies intended to restrict access for immigrant adults may ultimately exclude their children, most of whom are U.S.-born citizens. Because of these *federal* restrictions – which are maintained under the ACA – the bulk of immigrant healthcare policymaking is ultimately delegated to *states*. My first objective was to estimate gaps in insurance coverage by parental documentation status among a nationally representative sample of citizen children of Latino immigrants. Second, in light of immigrant healthcare policymaking at the state level, I sought to examine whether disparate state-level healthcare policy moderated the relationship between parental documentation status and children's coverage. My final objective was to explore the mechanisms through which parental documentation status affects children's access to coverage and care.

Methods: My mixed-methods sequential explanatory design integrated secondary data analysis with semi-structured interviews. In **AIM 1** I used the Survey of Income & Program Participation (SIPP) to estimate differences in insurance by children's citizenship and parental documentation status within a nationally-representative cross-section of 4,227 children of Latino immigrants. I pooled a cross-section of 1,260 children

of Latino immigrants from the final wave of the 2004 SIPP Panel (August-December 2007) with 2,967 children from the 2nd wave of the 2008 Panel (December 2008-March 2009). I first estimated uninsurance and coverage type by children's citizenship and parental documentation status. I then estimated binary and multinomial probit models to estimate the marginal effects of children's citizenship, parental documentation status, and their interaction on the probability of being insured (binary probit) and the probability of being insured by employer-sponsored insurance (ESI), Medicaid/CHIP, and direct-purchase or other private coverage (multinomial probit). In **AIM 2**, I used multilevel models to examine whether state-level policy on immigrant access to coverage moderated the effect of parental documentation status among a sample of 3,615 citizen children of Latino immigrants in 30 states with sufficient sample size for multilevel modeling. **AIM 3** consisted of semi-structured interviews with 14 Latino immigrant parents and 6 key informants in Minnesota, with the objective of uncovering mechanisms to help explain the relationship between parental documentation status and children's coverage identified in **AIMS 1 and 2**.

Findings: The children of Latino immigrants experienced high uninsurance rates and low rates of ESI. Non-citizen children fared the worst, with an uninsurance rates of 54.1% compared to 28.2% for citizen children ($p<.001$). Citizen children with at least one undocumented parent had lower rates of insurance than their counterparts (32% vs. 27% for citizen children with citizen/legal permanent resident (LPR) parents, $p<.001$). These differences were no longer significant after adjusting for age and immigration-related and socioeconomic barriers and facilitators. In adjusted multinomial models, citizen children

with undocumented parents were significantly less likely to hold ESI coverage than citizen children with two citizen parents. State-level policy on immigrant access to *prenatal* coverage moderated the effect of parental documentation status. In states where all (income-eligible) pregnant women are eligible for Medicaid coverage regardless of immigration status, there were no differences in children's uninsurance rates by parental documentation status. In these states, both children with at least one undocumented parent and their counterparts had an uninsurance rate of 26%. In states where undocumented pregnant women are not eligible for Medicaid prenatal coverage, 45% of citizen children with at least one undocumented parent were uninsured, 17 percentage points higher than children with citizen/LPR parents ($p<.001$). These differences held up in adjusted models. Finally, Latino immigrant parents for the most part did not feel their own documentation status affected their citizen children's access to coverage. Two key policies in Minnesota help explain why parental documentation status was not identified as a major barrier to coverage for citizen children. Prenatal coverage is available to all income-eligible pregnant women, regardless of immigration status, and newborns are automatically enrolled in Medicaid/CHIP when their mother is covered by the same at birth. In contrast, undocumented children are restricted from Medicaid/CHIP coverage, and as a result faced the greatest barriers to coverage and care.

Conclusions: The bulk of research on coverage disparities for children of immigrants has focused on parental *citizenship*. Examining parental *documentation* status – an often masked distinction – provides insight into lack of insurance generally and ESI specifically, and reveals further disparities. The degree of insurance and ESI followed a

strong gradient where children with undocumented parents experienced the most vulnerability and children with two citizen parents the least. The gap in ESI– which persisted after adjusting for several parental and family characteristics – appears to be the driving force behind these disparities. State-and local-level analyses provided a more complete picture of coverage disparities by parental documentation status.

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CHAPTER 1. INTRODUCTION AND BACKGROUND

Chapter summary

In this introductory chapter, I first briefly describe the specific aims and their significance, and provide a high-level overview of the motivation and contributions of my dissertation. I then move to a description of the pervasive barriers to coverage and care among Latino children, generally, and Latino children of immigrants, specifically. I follow with a discussion of the importance of examining mixed-status families for Latino children especially. There, I describe the prevalence of mixed-status families and demonstrate why documentation status can be considered a social construction. I then discuss the consequences of this social construction, in particular the coverage disparities experienced by children in mixed-status families.

An overview of the intersection of immigration and health care policy follows, where I argue that immigrant healthcare policymaking reflects notions of deservingness connected to documentation status. I again describe the consequences in order to inform how parental documentation status may affect children's access to coverage to both public and employer-sponsored insurance coverage. I return to immigrant healthcare policymaking to highlight the role of states in opening up or further restricting immigrant families' access to coverage. I then connect all of the above themes by describing the ecological, multilevel framework behind my conceptual model. I close this chapter by discussing my dissertation's broad contributions to the literature and to policymaking.

Introduction and specific aims

Latinos[1] represent the fastest growing segment of the U.S. population[1] and Latino children are persistently more likely than their peers to be uninsured, lack a usual source of care, and report fair/poor health (Bloom, Jones, & Freeman, 2013; Flores & Tomany-Korman, 2008; Langellier, Chen, Vargas-Bustamente, Inkelas, & Ortega, 2014; U.S. Department of Health & Human Services (DHHS), 2014). Despite major overall gains in children's insurance in the past two decades (Howell & Kenney, 2012), the uninsurance rate among Latino children is over twice that of non-Hispanic white and black children (Bloom et al., 2013). The 10 million Latino children with at least one immigrant parent are even more likely to lack coverage (Ku & Matani, 2001; Ojeda & Brown, 2005; Passel & Cohn, 2009), and most (60%) belong to mixed-status families (Passel, 2011) in which members are allocated across a hierarchy of citizenship and documentation statuses that confer different rights, benefits, and vulnerabilities.

Documentation status itself is a "policy-created category" (Abrego, 2011, p. 353), constructed primarily through decades of immigration policy, that has a profound impact of the lives of families and children. In particular, the precarious status of *undocumented* parents, has important ramifications for their children. Children rely on parents to access the health care critical for a healthy childhood and life-course trajectory (Forrest & Riley, 2004; Halfon & Hochstein, 2002; Halfon, DuPlessis, & Inkelas, 2007), and research

[1] Latino as used here refers to individuals of Latin American (or Spanish) descent, which includes persons who either self-identify as Hispanic/Latino and/or persons with origins in Mexico, Central and South America, certain Caribbean nations, and Spain. In the United States, Latino is (officially, according to the U.S. Census Bureau) considered an origin or ethnicity, not a race, so Latinos may represent any race (white, black, American Indian, Asian, etc.). Most Latinos in the United States are U.S.-born (Census), although my dissertation focuses on the children (born in or outside of the US) of Latino immigrants (persons born outside the United States.) Latinos are an extremely heterogeneous group, and research demonstrates that most Latinos identify with their county of descent first, before either Latino or Hispanic (Taylor, Lopez, Martinez, & Velasco, 2012). However, for purposes of my dissertation I focus on Latinos in general, although I recognize and appreciate the limitations of this approach.

demonstrates that undocumented status (and the associated stigma and fear of detection) present barriers to care among adult immigrants (Berk & Schur, 2002; Cavazos-Rehg, Zayas, & Spitznagel, 2007; McGuire & Georges, 2003; Park, 2011; Wallace, Torres, Sadegh-Nobari, Pourat, & Brown, 2013). In addition, federal restrictions on public coverage eligibility for permanent residents residing legally in the U.S. for less than 5 years and undocumented immigrants, first established under the 1996 *Personal Responsibility & Work Opportunity Reconciliation Act* (PRWORA) and the *Illegal Immigration Reform and Immigrant Responsibility Act* (IIRIRA) leave few avenues of coverage for these groups. These same inhibiting effects certainly impede immigrant children from accessing coverage and care, as they face the gravest barriers and consequently alarming rates of uninsurance (Passel, 2009; Ponce, Lavarreda, & Cabezas, 2011; Wallace et al., 2013). Immigrant adults also face significant restrictions on access to public coverage, and the barriers created by documentation status suggest that policies intended to restrict access for immigrant adults may ultimately exclude even their U.S.-born legally entitled citizen children.

The bulk of research documenting coverage disparities for children in mixed-status families has focused on parental citizenship – that is, whether immigrant parents born outside the U.S. have gained naturalized citizenship or remained noncitizens (see Table 1.1 for definitions) (Borjas, 2011; Brown, Wyn, Yu, Valenzuela, & Dong, 1999; Capps, Fix, Ost, Reardon-Anderson, & Passel, 2005; Ku & Matani, 2001; Durden, 2007; Huang, Yu, & Ledsky, 2006; Ojeda & Brown, 2005; Perreira & Ornelas, 2011; Seiber, 2014). Importantly, these disparities persist even among U.S.-born citizen children, a scenario which has been described as the existence of “two classes of citizen children”

(Fix and Zimmerman, 2001, p. 402). Citizen children with citizen parents have better access to coverage and face fewer barriers, while citizen children with non-citizen parents confront limited resources and greater vulnerability. Yet, beyond parental citizenship lies an important, often masked distinction whose effect on insurance has yet to be fully examined in a nationally representative sample: One quarter of all U.S.-born children in immigrant families have at least one parent who is undocumented (Passel, 2011), a critical factor that may reveal, in fact, *several* “classes” of citizen children.

Understanding coverage disparities by parental documentation status requires a fine-grained analytic approach to explain a complex phenomenon, as barriers and coverage restrictions related to parents’ status may act as significant barriers to children’s coverage, whether private or public. Parental documentation status has been examined in a handful of studies, but these studies are limited in rigor and/or generalizability, present mixed evidence, and all but one study used analytic techniques insufficient to assess both the direct and indirect effect of parental documentation status on coverage (Flores, Abreu, & Tomany-Korman, 2006; Graefe, no date; Guendelman, Angulo, Wier, & Oman, 2005; Halfon, Wood, Valdez, Pereyra, & Duan, 1997; Lurie, 2008;Weathers, Minkovitz, Diener-West, & O’Camp, 2008). In **AIM 1**, I improve upon past research by estimating both the direct and indirect effect of two distinct classifications of parental documentation status, along with children’s citizenship and their interaction.

The *federal* restrictions under PRWORA, ultimately delegate the bulk of immigrant healthcare policymaking to *states*. These federal restrictions are maintained even under the substantial coverage expansions of the 2010 *Affordable Care Act* (ACA); thus states remain the primary facilitators of public coverage for these excluded groups.

As a consequence, state-level health care policy with respect to immigrant eligibility varies tremendously across states. Children's coverage rates have also historically varied greatly across states (Blewett, Davern, & Rodin, 2004), and even more so for Latino children (Schwartz, Chester, Lopez, & Vargas Poppe, 2014; State Health Access Data Assistance Center (SHADAC) 2012). In 2010, uninsurance among Latino children ranged from 1.9% in Massachusetts (MA) to 29.2% in Mississippi, compared to 1.5% in MA to 18.4% in Nevada for children overall (SHADAC, 2012). Furthermore, coverage gaps between children of immigrants vs. non-immigrants differ significantly across states (Acevedo-Garcia & Stone, 2008; Sieber, 2013; Yu, 2008). Yet, no research has examined the joint impact of policies on immigrant access to coverage on gaps in insurance for the (Latino) children of immigrants across states, as I do in **AIM 2**.

Finally, my in-depth exploration of the experiences of parents navigating children's coverage identified underlying mechanisms in the relationship between parental status, state policy, and access (**AIM 3**). A recent review insists that the consequences of differing public program eligibility between parents and children have not been well established.[20] Through semi-structured interviews, the narratives of Latino immigrant parents and key community informants help fill this gap. In particular, findings from these interviews reveal not only the barriers, but importantly – so as to inform policy solutions – the facilitators to coverage and care.

My research lies at the intersection of two critical areas of policymaking in 2015 and beyond. In coming years and under constrained budgets, states will be making key decisions on coverage eligibility for the millions of immigrants excluded from the ACA. My exploration of state policies highlights their vital role in facilitating or restricting

access for immigrant families, and the indirect impact on children. Moreover, renewed attention to immigration reform heightens the need to understand the implications of the precarious status of millions of undocumented immigrants and their children, as well as the spillover of restrictions on public benefits for documented immigrants and their families. Finally, my approach addresses an NIH call for multi-level and mixed methods research to address the complex, multilayered nature of persistent health disparities (Dankwa-Mullan, Rhee, Stoff; Pohlhaus, & Sy, 2010; Ruffin, 2010).

This mixed-methods study aimed to examine the relationship between parental documentation status, state-level policy, and insurance coverage among the children of Latino immigrants. I also explored the mechanisms directly related to parental documentation status that underlie these relationships. My sequential explanatory design (Creswell & Plano-Clark, 2010) involved two phases: 1) a quantitative analysis of nationally representative secondary data (*Survey of Income & Program Participation*, SIPP) and 2) an in-depth qualitative component to help explain the quantitative relationships identified in the first phase. Specific aims were:

Specific AIM 1: Estimate the marginal effect of parental documentation status on insurance coverage among the children of Latino immigrants. Using nationally representative SIPP data that include a self-report measure of documentation status for noncitizens, I estimated differences in insurance and type of coverage by children's citizenship and parental documentation status within a nationally representative cross-section of 4227 children of Latino immigrants.

Specific AIM 2: Examine state policy on immigrant access to public coverage as a moderator in the relationship between parental documentation status and children's

insurance coverage. I hypothesized that the level of access to public coverage for immigrants may reflect public sentiment toward immigrants and/or the degree to which the immigrant community experiences barriers related to documentation status, and thus help explain the relationships explored in **AIM 1**. In states with greater access, I expected a weaker relationship between coverage and parental status, and in states with restrictive policies, a stronger association. To test this hypothesis within a multilevel model, I classified state-level policies within an access index – highlighting in particular immigrant access to prenatal coverage –alongside state-level controls.

Specific AIM 3: Explore potential mechanisms through which parental documentation status affects children's insurance coverage and access to care. AIM 3 uncovered mechanisms that help explain relationships between parental status and access identified in **AIMS 1 & 2**. I conducted semi-structured interviews with Latino immigrant parents (N=14) and key informants (N=6) in Minnesota (MN) as an exploratory case study to better understand how parental status affects access.

Background and significance

Latino children persistently experience higher rates of uninsurance, worse access to health care, and poorer health than their peers (Bloom et al., 2013; Flores & Tomany-Korman, 2008; Langellier et al., 2014; DHHS, 2014). Childhood health is a strong predictor of psychosocial, economic, and civic well-being in adulthood (Case, Fertig, & Hall, 2005; Halfon et al., 2007), and lack of insurance coverage and health care may set children on a vulnerable trajectory from a very young age (Forrest & Riley, 2004) with inequalities accumulating over the life course (Halfon & Hochstein, 2002). Both private and public coverage are essential for children's access to care (Kempe, Beaty, Crane,

Stokstad, & Barrow, 2005; Selden & Hudson, 2006; Szilagyi et al., 2004), and while the role of health care in producing health among adults is relatively modest as compared to other factors such as income, lifestyle, and education (Santerre & Neun, 2010), access to (and utilization of) health care has proven particularly important for children (Corman & Grossman, 1985; Seid, Varni, Cummings, & Schonlau, 2006).

This link between coverage, access, and health is particularly concerning for the well-being of the children of Latino immigrants, as they experience higher rates of uninsurance and worse access to care than Latino children in general (Durden, 2007; Ku & Matani, 2001; Ojeda & Brown, 2005). Children rely primarily on their parents (or guardians/other caregivers) to access the coverage and health care critical for a healthy childhood and life course trajectory. Thus, an examination of these disparities must account for the fact that the majority (60%) of the children of Latino immigrants live in mixed status families where their citizenship/documentation status differs from that of their parent(s) and/or sibling(s) (Passel, 2011), entailing differential access to resources (Fix & Zimmerman, 2001). Federal and state policies allocate and restrict benefits across family members based on immigration status; and the precarious status of undocumented immigrant parents in particular has important ramifications for their children, as I will discuss below.

Coverage, access, and health among Latino children

According to Halfon et al. (2007), "the scaffolding for physical, cognitive, and socio-emotional health is built in the early years of life" (p. 315). Just as investments in children's health can lead to substantial gains in adulthood – for both individuals and greater society – inequalities experienced in childhood may be exacerbated over time.

Poor health among children is troubling in and of itself, and the many health disparities observed later in life with origins in this accumulation of vulnerability only add to this concern. Moreover, as one's physical health is related to overall psychosocial well-being and ability to thrive, the tremendous health and health care disparities Latino children experience may place them at a disadvantage for years to come.

Despite major overall gains in children's coverage over the past two decades, due mostly to Medicaid/CHIP expansions (Howell and Kenney, 2012), coverage rates among Latino children continue to fall far below the Healthy People 2020 goal of 100% insurance (DHHS, 2010). In 2013, 11.5% of Latino children lacked health insurance coverage, the highest rate of uninsurance among their peers and over two times that of non-Hispanic white children (5.5%) (Schwartz et al., 2013).

Not surprisingly, Latino children's access to care and utilization also lag behind that of their peers year after year, including access to critical services such as preventive and dental care (Bloom et al., 2013; Langellier et al., 2014). Children lacking coverage are far less likely to have a usual source of care and far more likely to have delayed or unmet need for preventive, dental, or other medical care (Bloom et al., 2013; Newacheck, Stoddard, Hughes, & Pearl, 1998; Selden & Hudson, 2006). Indeed, in 2012 over one quarter (27%) of uninsured children lacked a usual source of care, whereas only 2% of those with private or Medicaid coverage were without a usual source of care (Bloom et al., 2013). Compared again to children with private or Medicaid coverage, children without coverage were five times less likely to have seen or talked to a health care provider in the past two years (Bloom et al., 2013).

As a consequence of high rates of uninsurance, among other factors, Latino children also experience worse access to care and lower utilization than their counterparts (Bloom et al., 2013; DHHS, 2014; Langellier et al., 2014). In fact, it appears the link between insurance and access to care among Latino children, in particular, may be even stronger than what has been observed among children in general (Flores et al., 2006). A survey of parents of Latino children in Massachusetts found that uninsured Latino children, compared to insured Latinos, had 23 times the odds of not having a regular source of care and two and four times the odds of experiencing a number of barriers to accessing care (Flores et al., 2006). More disheartening, even when Latino children are able to access health care, it is often of lower quality than the services and treatment their peers receive (Finkelstein et al., 1995; Flores, Rabke-Verani, Pine, & Sabharwal, 2002).

Childhood is a time of critical development during which preventive care is especially crucial to ensure optimal health, and Latino children are more likely than their peers to be in fair/poor health (based on parent report), and experience health inequalities across a number of outcomes. Compared to their counterparts, Latino children are more likely to have poor dental/oral health (Flores & Tomany-Korman, 2008; Federal Interagency Forum on Child and Family Statistics (FIFCFS, 2011) and higher rates of overweight and risk of obesity (FIFCFS, 2011), for example. Although no studies have looked specifically at the effect of access to and/or utilization of care on the health of Latino children, specifically, evidence does exist for children in general. For example, Seid at al. (2006) followed children enrolled in the State Children's Health Insurance Program in California and found that "realized access" (e.g., utilization of needed care), was related to clinically significant improvements in health-related quality of life

(HRQOL), an index measure of physical, mental, and social health. On the other hand, unmet need for care and barriers to care led to declines in HRQOL. If insurance coverage indeed does improve children's health significantly, the high rates of uninsurance among Latino children are particularly concerning.

Mixed-status families: demographics and disparities

Over half of Latino children have at least one immigrant parent (Fry & Passel, 2009). These 10 million children of Latino immigrants represent the fastest growing proportion of the U.S. population, and will account for one in five of the nation's projected 100 million children by 2050 (Passel, 2011). As is the case for the children of immigrants in general, Latino children with immigrant parent(s) suffer from even greater health care disparities than Latino children overall (Durden, 2007; Ku & Matani, 2001; Ojeda & Brown, 2005). The children of *undocumented* immigrant parents in particular appear to be the most vulnerable (Passel & Cohn, 2009; Stevens, West-Wright, & Tsai, 2010; Yun, Fuentes-Afflick, Curry, Krumholz, & Desai, 2013; Ziol-Guest & Kalil, 2012). Even among U.S.-born citizen children, children with at least one undocumented immigrant parent experience worse access to care and much higher rates of uninsurance (Stevens et al., 2010; Ziol-Guest & Kalil, 2012). Overall, 25% are uninsured compared to 14% of children of naturalized citizen and LPR parents and 8% of the children of U.S.-born citizens (Passel & Cohn, 2009).

Mixed-status families: Context and definitions

Sixty percent of the children of Latino immigrants live in what researchers have termed "mixed-status" families (Passel, 2011), where a child's documentation status differs from that of at least one member of their family, be it a parent or sibling. In 2009,

85% of the 10 million children of Latino immigrants were U.S.-born citizens. Over four million Latino children had at least one parent who was undocumented, and, similarly, most (81%) were U.S.-born citizens (Passel, 2011). The other 845,000 Latino children with at least one undocumented immigrant parent are themselves undocumented. In general, citizenship status among the children of immigrants varies greatly by age: 91% of children under age 6 with at least one undocumented parent are citizens, as compared to only one half of children age 14 to 17 (Passel, 2011).

The phenomenon of mixed-status families is a social construction, created through social and political processes that are based on a hierarchy of immigrant categories, themselves socially constructed through (a lack of) immigration policy and other structural factors (Abrego, 2011, de Genova, 2005). U.S. immigration policy greatly influences the “life conditions, choices, and expressions” (Lowe, 1998, p. 7) of immigrants, and “categories of deservingness” (Schneider & Ingram, 2005) determine which immigrant groups are blocked or enabled to become part of a nation’s citizenry (Lowe, 1998; Park, 2011). These delineations of certain groups of immigrants do not reflect characteristics inherent within persons, but rather are attributed through ever-changing social processes highly dependent on outside forces. For example, in times of economic prosperity and foreign security, immigrants – both to the U.S. and several other nations (e.g., England, France, Germany, Israel, the Netherlands, among others) – are able to cross borders and work (with or without authorization), as well as establish themselves and their families (Castaneda, 2009; Fassin, 2004; Grit, den Otter, & Spreji, 2012; Larchanche, 2011; Massey, 2014; Willen, 2007). Until, that is, an economic downfall and (real or perceived) threats to foreign security render their cheap labor a

burden rather than a premium, leading to augmented border security, ramped-up deportation, and fewer legal opportunities for entry (de Genova, 2005; Massey, 2003). Hence, the labels attributed to and the perceptions of immigrants are not a consequence of immigrants themselves having altered their way of being, but instead are a reflection of external social processes. This is not meant to dismiss the autonomy of immigrants themselves in influencing policy and creating different ways of belonging both within and outside the "official" nation-state.

Because of the confines of an approach that "neatly" classifies persons into groups based on immigrant, citizenship, and documentation status, I hesitate to define these categories. Nevertheless, if at least for the purpose of shared understanding of the work I present here, I will establish several definitions. In recognition of the complexity and the social meaning behind these categorizations, though, a significant portion of my proposed dissertation is dedicated to qualitative methods that will allow me to explore and better understand the continuum of immigration and documentation status.

Hereafter, references to "immigrants" in general include persons born outside the U.S., Puerto Rico, and other territories (whose parents were not U.S. citizens) who are citizens or nationals of another nation (also referred to as foreign-born).[2] As seen in Table 1.1, when I refer to citizens, I refer to both *citizens born in the U.S.* or born abroad to (or adopted by) U.S. citizens, *and* immigrants born outside the U.S. who have become *naturalized citizens*. Naturalized citizens are individuals who were not U.S. citizens at the time of birth, but were first granted legal permanent residence and subsequently have been conferred U.S. citizenship by meeting several requirements outlined in the

[2] There also exists a very small, although not trivial, minority of "stateless" persons who are "not considered a national by any state" (United Nations High Commissioner for Refugees, 2013)

Immigration and Nationality Act of 1952 (Pub L No. 82-414, 66 Stat 163). Children under age 18 born outside the U.S. are automatically naturalized given they are first granted legal permanent residence and have at least one U.S. citizen parent who has legal custody of them. Naturalized citizens hold nearly all the same rights as U.S.-born citizens. These categories of immigrants and citizenship are at least officially fairly straightforward, although their construction and meaning are certainly contested and complex. Designations among noncitizens are far more ambiguous: Migrants enter the country with or without authorization, and even when they are authorized to enter, their status upon arrival can fall into literally dozens of categories, just as the length of time and conditions of their temporary "stay" or permanent migration vary.

The focus in my dissertation is on the varied documentation status of these noncitizens, literally whether or not they possess official "documents" authorizing them to reside and/or work in the U.S. (as even unauthorized immigrants possess several types of documents). The largest group of *noncitizens* consists of *legal permanent residents* (LPRs), or those who have been granted lawful permanent residence (e.g., 'green card' holders) but are not yet U.S. citizens (Rytina, 2012). Of course, even within this group of LPRs there are further demarcations, including whether an individual was granted legal permanent residence prior to or after 1996 (as part of PRWORA and IIRIRA, which I discuss in detail below), the number of years he/she has had legal permanent residence, or whether he/she entered the U.S. as a refugee and/or was granted asylum after arrival. The next largest group is *undocumented immigrants*, or persons who have: 1) entered the U.S. without approval from immigration authorities, or 2) violated the terms of a temporary admission (e.g. overstaying a tourist/student visa without status adjustment). It is

estimated that about half of all undocumented immigrants currently residing in the U.S. entered without authorization, while the other half overstayed a temporary visa (Congressional Budget Office, 2007).

This latter category brings me to the "last" clearly designated group of noncitizens: persons "temporarily" residing in the U.S. on a work, student, or tourist visa. The federal government officially refers to these persons as "non-immigrants" because of the temporary status of their stay. Other less common distinctions among noncitizens include persons granted deferred action (based on the July 2012 administrative directive, *Deferred Action for Childhood Arrivals* (DACA)),[3] immigrants on parole or whose deportation is being withheld, and some victims of domestic violence or "severe forms of trafficking," for example (Assistant Secretary for Planning & Evaluation (ASPE), 2009). Deferred Action for Parents of American and Lawful Permanent Residents (DAPA), an executive action signed in November 2014 that has now been blocked through a federal court order, would have also provided protection from deportation and work permits to an estimated 4 million adults who have resided in the U.S. for at least five years and have U.S. citizen or LPR children. Finally, it should be noted that – as with all labels created and attributed through social and political processes – persons move across citizenship/documentation statuses. For example, all naturalized citizens were once LPRs – some were even refugees, asylees or, undocumented – and currently 65% of LPRs are eligible to naturalize (Rytina, 2012). Similarly, many refugees and undocumented

[3] DACA, an executive action implemented in 2012, provides renewable temporary permission to remain in the United States (e.g., protection from deportation) as well as work authorization to youth under the age 15-30 who came to the United States before age 16 and meet other requirements related to length of time in the United States, education/military service, and criminal record. Importantly, although it provides protection from deportation and work permits, it is neither considered a "lawful" status, nor is it a pathway to lawful status (USCIS, 2014).

immigrants are in the process of applying for legal permanent residence or will adjust their status in the future.

In most Latino families, family members find themselves allocated across documentation statuses, and as such, differentially blocked or enabled from social belonging or formal citizenship and its accorded rights and benefits. Given the significance of these distinctions for navigating and accessing resources, as well as encountering barriers (Fix & Zimmerman, 2001), these differences among members of mixed status families are far from trivial. There are several scenarios in which a child's status differs from that of their sibling(s). For example, one sibling is born in the U.S., while the other sibling migrated here, and so one sibling qualifies for Medicaid while another only qualifies for emergency medical services, and as such parents may be hesitant to apply (Park, 2011). However, the impact on access to coverage and care is greatest when a child's status differs from that of their parent (Fix & Zimmerman, 2001).

Table 1.2 presents a simplified picture of several scenarios of "mixed" status between immigrant parents and their children. The documentation status of children born outside the U.S. almost always matches that of *at least one* parent (as seen on diagonal),[4] as children most often obtain permanent residency or naturalized citizenship through their parents (Monger & Yankay, 2012). Differences between parental and child status are most often observed when children are born in the U.S., and thus are citizens, while their parents are of varying documentation status (as seen in the first row). As I have noted, the

[4] There are also many scenarios where a child's mother and father do not have the same documentation status. This is even the case when the child's parents are married, as marriage does not necessarily provide or imply automatic adjustment of status. In Chapter 2 (Methods), I discuss how I allocate parental status for children living in families in these scenarios. I also include children in families where one parent is an immigrant (e.g., born outside the United States) and the other parent is a U.S.-born citizen. Certainly, this distinction will matter less in some cases (e.g., if the other parent is a naturalized citizen) than in others (if the other parent is undocumented).

distinctions among immigrants are far more complex than the scenarios presented here,[5] yet I introduce them because they are central to the core relationships I am able to explore with the available data.

Coverage and access disparities among the children of immigrants

The children of immigrants, in general, are more likely than their peers to live in poverty (Borjas, 2011; Capps et al., 2005), be uninsured (Brown, et al., 1999; Ku & Matina, 2001; Ojeda & Brown, 2005; Passel & Cohn, 2009; Seiber, 2014), lack a usual source of care (Capps et al., 2005; Durden, 2007; Huang, Yu, & Ledsky, 2006; Ku & Matina, 2001; Langellier et al., 2014), and report fair/poor health (Capps et al., 2005; Huang et al., 2006). Given that nearly 60% of Latino children have at least one immigrant parent (Passel, 2011), it comes as no surprise that parental citizenship contributes substantially to high uninsurance and poor access to care (Brown et al., 1999; Capps et al., 2005; Durden, 2007; Huang et al., 2006; Ku & Matani, 2001; Perreira & Ornelas, 2011). Although citizen children in general have higher rates of coverage, U.S.-born citizen children with *non-citizen* parents report lower coverage than the U.S.-born children of *citizens* (even in adjusted models) (Huang et al.; Ku & Matani; Ojeda & Brown, 2005). Some evidence even suggests that *U.S.-born* children with *non-citizen* parents are more likely to lack coverage than *naturalized citizen children born abroad* (Huang et al., 2007; Passel, 2009). The children of noncitizens are also more likely to rely on the emergency room, as opposed to a doctor's office, as a usual source of care (Durden 2007), which may often entail disjointed care and a lack of the routine, preventive care that is so important in childhood (Walls, Rhodes, & Kennedy, 2002). In

[5] Non-immigrants, *some* refugees and asylees, and some other non-citizens are not included in these scenarios, and some of these distinctions are important in the policy context of PRWORA and IIRIRA, as I explain below.

addition, although all citizen children meeting income guidelines are eligible for Medicaid/CHIP, citizen children with *non-citizen* parents are less likely to enroll than the citizen children of U.S.-born *citizens* (Borjas, 2011).

Beyond parental citizenship, limited evidence also exists for disparities by parental documentation status, although the direction and magnitude of findings are mixed. A survey conducted in the Greater Boston area showed that children with *undocumented* parents had 7 times the odds of being uninsured (as compared to the children of U.S. *citizens*) (Flores et al., 2006). Yet, insurance coverage was *not* related to parental documentation status among the children of migrant workers in a similar study in North Carolina (Weathers et al., 2008). Importantly, neither of these studies examined the nativity or citizenship/documentation status of children themselves. Because a child's own status is likely a stronger predictor of coverage, any exploration of parental status must also include this measure in order to unpack both the direct and indirect impact of parental status and as such inform policy efforts to increase coverage. For example, if we find that having at least one undocumented parent is associated with lower likelihood of coverage, is it because most children with undocumented parents are themselves noncitizens or do these disparities exist even for citizen children with undocumented parents? If the former, policy efforts should focus on opening up access to undocumented children historically excluded from public coverage eligibility. In the latter, initiatives would need to address both children's public coverage eligibility and barriers impeding parents from enrolling their eligible children.

Analyses from the California Health Interview Survey (CHIS), the Current Population Survey (CPS), and the Survey of Income Program & Participation (SIPP)

begin to shed light on this question by accounting for both children's citizenship and parents' documentation status. In nearly every study, c*itizen* children with *undocumented* parents were less likely to be insured than their counterparts with *documented* parents (Graefe, working paper, no date; Passel & Cohn, 2009; Ponce et al., 2011; Stevens et al., 2010) – Ponce et al.'s study from the 2007 CHIS was the exception. However, the two studies providing nationally representative estimates – the Pew Hispanic Center's (PHC) analysis of CPS data (Passel & Cohn, 2009) and Graefe's analysis of the children of Mexican immigrants in the SIPP (no date) – did not account for any child or parental characteristics beyond citizenship/documentation status (and age in Graefe). In addition, the PHC study only looked at insurance vs. uninsurance, as opposed to type of insurance coverage. Therefore, while they represent important contributions in beginning to expose previously masked disparities among a vulnerable group, further studies are needed to help us understand the mechanisms behind these disparities.

One study that was able to directly measure the effect of parental documentation status, after accounting for a number of controls, provided evidence of a "chilling effect" related to parental status in which the *citizen* children of *non-permanent residents (e.g., undocumented)* lost coverage following implementation of enhanced restrictions on parents' Medicaid eligibility in the Personal Responsibility and Work Opportunity Reconciliation Act (Lurie, 2008). However, this study was limited to six states, was focused on a specific question examining changes over time, only looked at uninsurance generally (as opposed to type of coverage), and only looked at children of non-citizens, or specifically, *legal permanent residents* and *undocumented* immigrants. Importantly, both Lurie's and Graefe's studies take advantage of unique documentation status measures –

recently validated by Bachmeier et al. (Bachmeier, Van Hook, & Bean, 2014) – from the nationally representative SIPP, the dataset that I examined here. However, due to lack of a measure of children's nativity/citizenship in earlier waves of the SIPP, children's citizenship status is inferred based on their mothers' last year of entry to the U.S. and documentation status.

In summary, much evidence demonstrates disparities in coverage and access to care among the children of immigrants based on parental citizenship status, and even greater disparities associated with parental documentation status. However, research on the latter is limited in rigor and/or generalizability. My research contributes by employing statistical techniques that will measure the relationship between children's citizenship and their coverage, parental documentation status and children's coverage, and the interaction of the two. In doing so, I will contribute to our understanding of the implications of varied documentation status across family members.

Constructions of deservingness, institutional barriers, and children's access to coverage and care

> as a country…we are welcoming and xenophobic all at once. We want their [immigrants'] energy and their hustle but not their illnesses or their family problems. We consume their labor in huge quantities, but we're not ready to give them jobs with benefits—or have the government make up the difference (2005, p. 1622). – Fitzhugh Mullan, "Immigration Pediatrics," Health Affairs

As Mullan alludes to, an exploration of disparities in (Latino) children's coverage and documentation status must attend to both – in fact, the intersection of – immigration and health care policy. Public policies systematically restrict access for immigrant adults and children, and even when their children are eligible, fear of deportation or the stigma associated with their precarious status may impede mixed-status families from interacting

with public institutions. Furthermore, a labor market supported heavily by "officially disavowed and yet unofficially mandated" (Lowe, 1998, p. 21) undocumented migration leaves families with few, if any, options for coverage in the private sphere. Finally, wide variation in Latino children's coverage across states, coupled with disparate state-level immigrant health care policy, suggests that the degree to which immigrant families experience these barriers depends greatly on their state of residence.

Constructions of deservingness

According to Schneider & Ingram (2005), public policy is the "primary means of legitimating, extending, and even creating distinctive populations" (p. 2). Policies define the rights and benefits to be conferred upon distinct populations, based on notions of "deservingness," and members of mixed status families find themselves allocated across separate and unequal groups. Immigration and health care policy are both consistently recognized as prime examples of the allocation and elimination of benefits based on categories of deservingness (Mettler & Soss, 2004; Schneider & Ingram; 2005), and undocumented and other immigrants (both adults and children) have been negatively constructed as undeserving of and ineligible for public benefits (Park, 2011). Their U.S.-born children, on the other hand – in particular their children born in the U.S. – are at least officially/legally entitled to myriad rights and benefits as U.S. citizens, benefits and rights they must rely on their parents to access.

PRWORA and IIRIRA are arguably the starkest example of constructions of deservingness at the intersection of immigration and health policy (Newton, 2005; Park, 2011; Viladrich, 2011). Reinforcing categorical hierarchies among immigrants, PRWORA put in place federal restrictions that to this day make it difficult for states and

even the federal government itself to open up access to health care benefits for legal and undocumented immigrants, including the most vulnerable of groups, pregnant women and children. For example, although undocumented immigrants were ineligible for federally-funded benefits prior to PRWORA, its enactment made it against the law for state and local government to extend them these benefits. Restrictions for legal immigrants were achieved by constructing immigrants as a burden or "public charge" (Park, 2011) from whom U.S. taxpayers must be protected, resulting in the creation of a distinction between "qualified" (arrived before 1996) and "nonqualified" (arrived after 1996) immigrants and a ban on public benefit eligibility for nonqualified legal permanent residents residing legally in the U.S. for less than 5 years.[6]

Documentation status and access to coverage and care

Because they were left out of Medicaid/CHIP federal funding entirely, the dire consequences of PRWORA restrictions for children who are themselves undocumented are unfortunately not surprising, but why might these exclusions also matter for U.S.-born citizen children? Parents are facilitators for accessing resources (Halfon, Inkelas, & Wood, 1995) and as such a parent's own context can be even more important than factors related solely to the child. For example, parental coverage is a strong predictor of both children's coverage and their access to care (Davidoff, Dubay, Kenney, & Yemane, 2003), as parents' own ability to access health care influences their ability to navigate their child's care as well. Although my interest is children's access to coverage and care, *parents* must navigate the system for children, and as such any analysis of access should

[6] Refugees, asylees, persons paroled into U.S. for at least one year, persons with withheld deportation, persons granted conditional entry, Cuban/Haitian entrants, and victims of domestic violence or "severe form of trafficking" are also considered eligible regardless of date of entry (e.g., not subject to 5-year ban) (ASPE, 2009).

focus on both children and parents.

Because of the "different degrees of power and control that adults and children have over their own access to care" (Costello, Pescosolido, Angold, & Burns 1998, p. 167), models of children's access to care do not fit neatly into frameworks originally intended for examination of adults' access (Halfon et al., 1995). A parent's own context may be even more important than factors related solely to the child. For instance, Mechanic (1964) has demonstrated in his exploration of illness behavior that although mothers' attitudes toward sickness and their own help-seeking and attention to symptoms are not related to their children's attitudes toward illness, mothers' illness behavior does predict whether services are sought for children when sick. Empirical work also highlights the importance of a parent's own access to care in determining children's realized access, where – although whether children themselves are insured appears more important – children with an uninsured parent are less likely to utilize care and receive well-child checkups, suggesting that facilitating parents' access may lead to spillover effects that also increase children's access (Davidoff et al., 2003).

Parental documentation status and access to coverage and care

> For these people, it doesn't matter that we've lived here for 15 years, that we've been raising children who are good people, that we are buying houses. All they see is that we are 'illegal.' That's the only thing they see. Since we're 'illegal,' they don't care if our children are well (Abrego, 2011, p. 353).

A mother's words in the above passage demonstrate the tension that exists for immigrant parents caring for their children within a contentious environment, articulating a scenario in which society's perceptions of and hostile feelings toward (undocumented) immigrant parents compromise the well-being of the children of these immigrants. Essentially, as I note briefly above, the constructions of the worth or deservingness of certain parents

could transcend that of their children. Within such an environment, there are several pathways through which a parent's documentation status may affect their children's access to coverage and care, yet the current knowledge base is limited. Important mechanisms related to the precarious status of undocumented immigrants – such as the difficulty or impossibility of interacting with institutions requiring state-issued identification, and constant fear of detection and deportation (de Genova, 2005; Lyon, 2004; Yoshikawa, 2011) – likely play a significant role in disparities.

Given that documentation status affects access to care, we can expect the processes that hinder access for parents to spillover to their children, whether through public policies that restrict their own access, avoidance of institutions due to the stigma associated with their precarious status, or an erosion of their feelings of deservingness (Willen, 2011). Moreover, the current policy context has implications for even the children of those immigrants residing legally in the U.S., as significant restrictions on their parents' access to coverage and care exist as well and immigrants have significant (not unfounded) concerns about the potential for their or their children's participation in public programs to threaten their ability to remain in the U.S. legally.

Fear of detection and/or deportation is related to physical and mental health among adults seeking care for themselves. Latino immigrant adults surveyed in Cavazos-Rehg et al.'s (2007) study who believed that going to a "social or government agency for assistance would lead to deportation" were more likely to be in poor mental or physical health. This link between health and status may be more difficult to unpack, but there are also significant disparities in accessing care related to fear of detection. Forty percent of undocumented adults responding to Berk & Schur's (2001) study on access to care in

Texas and California reported fear of seeking services because of status. Not surprisingly, those reporting fear related to documentation status were more likely to report unmet need for both care and prescription drugs. While these surveys have begun to help us understand the fear related to documentation status, the complexity and tensions that exist call for more in-depth, rich accounts of the context under which undocumented immigrants attempt to access care.

McGuire and Georges' (2003) ethnographic work with Mexican undocumented migrant workers demonstrates the role that "undocumentedness" plays as a barrier to accessing health care services. Women participating in their study described being "afraid to go out and only go[ing] when it's necessary" and avoiding seeking necessary care for fear of deportation, as one woman related:

> One day I was feeling really bad and I told my sister-in-law how badly I felt. Then a friend told me to go to this place where they would help me…I told her that I didn't have even one paper and I am not here legally. I was very fearful and I told her what if they ask me for my papers when I go and immigration comes to get me. They could deport me back to my country and so I was very afraid. (p. 191).

This woman's and other immigrants' fears of detection and/or deportation when seeking care are not unfounded. Park's (2011) rich accounts of low-income immigrant women navigating health care and coverage in California uncovered alarming accounts of Immigration & Customs Enforcement (ICE) vans camping out in clinic parking lots (p. 122), as well as signs in social service offices that assist with Medi-Cal (county-operated Medicaid) applications informing applicants to "be aware that we can send any information you give to the INS" (p.43). PRWORA actually required states to confirm with ICE the documentation status of immigrants' seeking coverage funded by the federal

government and social service workers and providers often struggle to calm the fears of applicants in the face of this requirement (Park, 2011).

Undocumented immigrants, however, are not the only immigrants who experience fear when accessing services. In fact, restrictions faced even by legal permanent residents related to "public charge" can lead to denial of permanent residence, future admission, or even deportation. Park documents that these are not just hypothetical but have occurred often enough for the word and fear to spread. We know that immigrant parents (as with parents in general) take tremendous risks to access care for their children (Garcia, Pagan, & Hardeman, 2010; Lessard & Ku, 2003; Park, 2011). However, if this very real fear of deportation because of precarious status or from becoming a "public charge" is indeed related to unmet need for care for adults, then it is plausible that it could affect access for the children of immigrants, as well. Beyond this actual link between documentation status and fear, we also know that there is a tremendous amount of misinformation circulating with regard to parental status being taken into account when determining children's eligibility for public programs, which would clearly work as a barrier to Medicaid/CHIP enrollment among the children of immigrants (Fix & Zimmerman, 2001; Ku & Matani, 2001; Park, 2011; Yoshikawa, 2011). (And, in fact, circumstances such as the ICE signs in social service offices in CA only serve to reinforce this belief).

According to Suarez-Orozco et al. (2012) in their review of the implications of parents' authorized status for the development of their children, the consequences of differing eligibility (for public health care programs specifically) between parents and children has not been well established (Suarez-Orozco, Yoskikawa, Teranishi, & Suarez-Orozco, 2012). Although a good amount of research, such as the studies I describe here,

has looked at the experiences of immigrants navigating the health care system, a focused exploration of the role of documentation status – in particular the precarious status of undocumented immigrants – for parents navigating coverage and care for their children has much to offer.

Furthermore, we know more about – or might conjecture on – how parental documentation status may lead to an avoidance of public programs or health services in order to prevent detection and possible deportation. However, public coverage is certainly not the only means of accessing the health care system and the nature of health insurance and care is the U.S. is a private-public partnership where most individuals access coverage through their employer (Smith & Medalia, 2014). Many undocumented immigrants work for large employers, albeit unofficially, that offer insurance coverage and so families may access coverage through these means, as well. Indeed one-third of undocumented immigrant adults have employer-sponsored coverage (Passel & Cohn, 2009). Yet, no studies to date have explored in-depth how parents navigate private coverage for their children, and whether the same barriers that may prevent enrollment in public coverage also affect the purchase of a private product. My qualitative research helps fill this gap by capturing the intricacies of immigrant parents' experiences navigating the health care system for their children.

Access to ESI coverage

Any discussion of access to employer-sponsored benefits for undocumented immigrant families must recognize the reality that undocumented migrants are at once "unofficially welcomed" by receiving nations to address a need for low-wage labor, yet "officially unwelcomed" (McGuire & Georges, 2003, p. 190) as evidenced by restrictive

policies that prevent them from fully participating in or receiving benefits from these nations (de Genova, 2005; Lowe, 1998; Massey, 2014; Park, 2011). For example, in the U.S., undocumented immigrants – although not allowed to work legally – are required to file taxes through the use of an Individual Tax Identification Number *issued by the federal government* to workers without social security numbers (CBO, 2007). Through these ITIN, undocumented workers contribute billions in income and social security and Medicare payroll taxes. In fact, a 2005 Council of Economic Advisors Report to the President reported that an estimated 6 million (or 75% of) undocumented workers file taxes annually, and in 2002 alone paid nearly $463 billion in to social security. More recently, Zallman et al. estimated that from 2000 to 2011 undocumented immigrants contributed over $35 billion to Medicare's Trust Fund, even accounting for the limited group of immigrants who would have used benefits after adjusting their status and becoming eligible for these benefits (Zallman, Wilson, Stimpson, Bearse, Arsenault, et al., 2015). Yet, despite the labor and taxation of undocumented workers as acknowledged in official reports, the federal government and corporations that hire undocumented workers are seldom implicated and the spotlight remains on the "illegality" of the undocumented, who are given little, if any, benefits in return for their highly demanded labor and substantial economic contributions.

I emphasize this paradox as it is demonstrative of the labor market within which undocumented immigrants find themselves. With an appreciation of both the official and unofficial conditions of undocumented immigrants' labor it comes as no surprise, for example, that just under one third of undocumented immigrant adults hold ESI coverage (Capps, Bachmeier, Fix, & Van Hook, 2014). Yet, our knowledge and understanding of

their interaction with employer-sponsored benefits ends there. What we do not know, for a variety of reasons, is what proportion have access to and subsequently take-up these benefits – often the only benefits available to them given the public coverage restrictions undocumented immigrants face. The best estimates of ESI offer and take-up come from employer surveys, and for obvious reasons such surveys cannot discern the documentation status of workers within firms.

As with understanding of documentation status and coverage generally, which is limited, the data available on noncitizens' access to coverage can at least somewhat inform what we might expect for undocumented immigrants' access. Noncitizens in general (and their families) are much less likely than citizens to hold ESI coverage. However, evidence demonstrates that this disparity is almost entirely related to differences in ESI *offer* rate as opposed to differential rates of *take-up* (Buchmueller, Lo Sasso, Lurie, & Dolfin, 2007). Noncitizens, and noncitizen Latinos in particular, are more likely to work in smaller firms or industries with lower ESI offer rates (Schur & Feldman, 2001). However, when in industries or firms where ESI is made available, they are no less likely than their citizen counterparts to take up this coverage (Buchmueller et al., 2007). Most undocumented immigrants work in industries that are far less likely to offer benefits such as health insurance, but many others do in fact work in industries that offer coverage to most employees and their families (Passel & Cohn, 2009), as evidenced by the fact that almost one third currently hold ESI. But, again, what is not clear is how many undocumented immigrants in these industries are on or off "official" payroll or whether health benefits offered to most employees are extended to undocumented workers, specifically. Employer surveys cannot distinguish workers by their

documentation status, and self-report surveys such as the SIPP only tell us whether and in what type of firms undocumented immigrants work, not how they accessed this employment.

In addition, in cases where undocumented workers are offered health insurance through their employer and dependent coverage is made available, premiums for dependents are likely out of reach for many immigrant families (BeLue et al., 2014; Dubay, Holahan, & Cook, 2007). Even though households with undocumented immigrants have a higher number of workers per household than households with only U.S.-born, most live on incomes far below the median U.S. income and one third of children with undocumented parents live in poverty (Passel, 2009). Families without ESI could potentially access direct purchase private coverage, but premiums are likely even more cost-prohibitive (Dubay et al., 2007) and documentation/identification requirements could prevent undocumented immigrants and their families from accessing these plans. Therefore, children with undocumented parents appear to have few, if any, options for coverage in the private market. My dissertation contributes by estimating what proportion of the children of undocumented immigrants have ESI, as well as examining what characteristics contribute to their likelihood of being covered. I also learn about parents' experiences in the unofficial, yet official labor market, which begins to help inform understanding of access to and take-up of ESI, as well as unique barriers and facilitators to ESI undocumented immigrants face.

PRWORA and the devolution of power to states

Coming back to public coverage, if – as the literature would suggest – restrictions on parents' own coverage and access to care lead to limited interaction with and limited

knowledge of the health care system for themselves, we may observe a troubling scenario where policies intended to restrict access for immigrant adults ultimately end up restricting access for their children, even if these children themselves are categorically eligible. If the stigma and fear related to parental documentation status indeed play a role as barriers to coverage for children, one can expect that the effect of parental documentation status on access to coverage among the children of Latino immigrants will be mitigated in states with less restrictive eligibility as related to immigrant access to public coverage (see Section III, Table 4). More importantly this would suggest that states, through the creation and maintenance of initiatives that expand access to immigrants in the face of federal restrictions, can and do play an important role in minimizing fear and stigma related to accessing coverage and/or health care. Even though these initiatives should not directly affect U.S.-born children, for example, it could be that as more immigrant families interact with the health care system – through better access – the immigrant community in general feels less stigma and fear when seeking coverage and services, thereby affecting U.S. born children indirectly.

The federal restrictions in PRWORA have led to a devolution of power to states in past decades, manifested in disparate health care policy across states, especially in policies related to immigrants' access to public coverage. In light of federal restrictions, states have employed various strategies to cover gaps in public coverage for immigrant women and children, in particular. Post-1996, states had to proactively enact their own legislation to cover undocumented immigrants or legal immigrants subject to the 5-year ban, as well as fully fund these benefits (KCMU, 2009). The Children's Health Insurance Program (CHIP) *Unborn Child Amendment of 2002*– provided states the option of using

federal matching funds to cover income-eligible pregnant women regardless of documentation status. The pregnant woman's documentation status is not taken into account because funds are officially allocated to cover the care of "unborn children" rather than pregnant women. Again, though, coverage was extended only in states proactively passing legislation to cover this prenatal care.

Prior to 2009, all coverage extended to excluded children (legal permanent residents subject to the 5-year ban and undocumented immigrants) was funded solely through states, with no federal match. Legislation passed in 2009, the *Immigrant Children's Health Improvement Act* (H.R. 319, 111th Cong. (2009)), gave states the option of federal matching payments to cover legal immigrant pregnant women and children subject to the 5-year ban. As of 2009, 14 states and DC provided coverage to immigrant pregnant women regardless of status under the "Unborn child" option. Eight additional states financed care for pregnant immigrant women through general state funds, although only two covered undocumented immigrant women. Seventeen states financed coverage for legal immigrant children subject to the 5-year ban; only four of these states (+ DC) also covered undocumented immigrant children (KCMU, 2009) (see Chapter 2 (Methods)).

Finally, while ACA introduces substantial uniformity to state Medicaid policy in several respects, disparate policies on immigrant access to public coverage will persist. The ACA maintains federal restrictions for legal immigrants subject to the 5-year ban and undocumented immigrants (KCMU, 2012), again leaving states as the primary facilitators of public coverage for these groups. Thus, the heterogeneity of these policies across states will remain of key interest to researchers and policymakers alike. Despite wide

variation in state-level policies related to access to public coverage for immigrants, no research has examined coverage differences across states by considering the joint impact of this wide array of policies, as I do here. Although I do not examine these polices here, it is also important to mention that state-level policy with respect to immigration, broadly, also differs greatly across states. In 2007 and 2008 (the years from which my data originate), in particular, the NCSL asserted that states were "tackling immigration issues…at an unprecedented rate," with 1562 bills introduced in 2007 and 1305 in 2008 (National Council of State Legislatures (NCSL), 2009). Legislation regarding local immigration enforcement, employment, access to identification/driver's licenses, public education, and migrant workers, while not directly tied to healthcare policy, clearly shape immigrants' ability to seek resources and services.

Finally, rates of children's coverage, in general, have historically varied greatly across states (Blewett et al., 2004), but even more so for Latino children (Schwartz et al., 2014; SHADAC, 2012). For instance, in 2010 uninsurance among all children ranged from only 1.5% in Massachusetts to 18.4% in Nevada, but from 1.9% in Massachusetts to 29.2% in Mississippi for Latino children (SHADAC, 2012). In addition, disparities in coverage between children of immigrants vs. non-immigrants are large in some states and non-existent in others (Acevedo-Garcia & Stone, 2008; Sieber, 2013; Yu, 2008). I used multilevel modeling to examine the disparate state policies following PRWORA, and that are likely to continue under the ACA, as a factor in helping explain these coverage gaps for Latino children across states, in particular these policies' interaction with parental documentation status.

Conceptual model

My conceptual framework, adapted from Brofenbrenner's (1986) ecological model, conveys the multi-layered nature of the relationship between parental documentation status and access to coverage. In particular, this framework brings to the forefront the systemic, structural factors – most importantly immigration and health care policy – that profoundly influence families' ability to secure coverage for their children.

I conceptualize access to health insurance coverage among the children of Latino immigrants within a multi-level, ecological framework encompassing individual-, family, community-, and system-level facilitators and barriers. As seen in Figure 1.1, an ecological model situates individuals within an ever-fluid web of interacting, multi-layered factors that provide protection or risk, and sometimes both. Recognition of this context is especially helpful for my study, as it brings to the forefront the reality that children's well-being is strongly influenced by a host of forces outside the individual child. My framework highlights the fact that children exist within families, and by design incorporates the structural forces that lie outside an individual's reach but profoundly shape their everyday life. This is especially important for understanding parental documentation status, as its meaning and circumstances are highly influenced by local, state, and federal policy. Typically used within social-developmental models (Brofenbrenner, 1986), an ecological framework is also appropriate for examining access to coverage for its ability to depict the complex private-public partnership that defines the U.S. health care and health insurance system, with access determined through state and federal policy, along with heavy emphasis on employer-sponsored insurance in the private market. The primacy of parental documentation status and coverage in my study

necessitates the inclusion of even more layers of influence, as immigrants – especially undocumented immigrants – face unique barriers to coverage originating at both the policy- and system-level and within the employer-sponsored insurance market.

Individual-/child-level barriers and facilitators

At the individual- or child-level, age and health status as well as my primary concept of interest – citizenship/documentation status – arise as important predictors of health insurance coverage. In the realm of health insurance coverage, children's citizenship or documentation status is important mainly because of federal and state-level guidelines that define which immigrant children are eligible for Medicaid/CHIP (KCMU, 2009). These distinctions account for most of the large disparities in children's coverage by citizenship status, and therefore play a major role in every layer of my study. However, beyond these policy-driven distinctions, children's citizenship status does not inherently determine access to coverage. Rather, a child's own citizenship status is tied to their parents' citizenship/documentation status and parents' ability to seek coverage for their children within the constraints of a system that restricts economic and social resources and opportunities to certain groups.

Age must be considered in models of health insurance coverage because in many states Medicaid/CHIP eligibility levels vary greatly across age groups. For example, in Kansas in 2008 infants (age 0-1) were eligible at 150% FPG, compared to eligibility levels of 133% FPG for one to five-year-olds and 100% FGP for children age six to nineteen (KCMU, 2009). Thus, the probability that a child will be covered by public programs is certainly dependent on age. Health status can influence a child's likelihood of having coverage due to the fact that children who are in poor health may have greater

need and thus parents are more likely to seek out coverage, or children may qualify for public programs due to their health condition.

Family-level barriers and facilitators

A wealth of family-level factors are essential in determining coverage as children do not navigate insurance coverage on their own; rather, they depend on parents or other adult family members to facilitate and access necessary resources (Halfon et al., 1995). The focus on family-level factors is especially the case in my work here where I examine parental documentation status as the driving predictor of coverage. My placement of parental documentation status at a more micro level is not meant to convey that status is "determined" by families themselves or even within individual families' control. Rather, I place it here because it is measured at the family-level. Nevertheless, I cannot emphasize enough how strongly parental documentation status especially is determined by structural, policy-level factors, and I intend to keep that point at the forefront throughout my analyses and discussion.

A key relationship of interest in my study is the interaction of child and parental documentation status. Because parents navigate children's coverage, any differences in coverage that remain after accounting for a child's status are likely associated with parental status. *Foreign-born* children's documentation status is highly correlated with that of at least one parent (Passel, 2011; Fix & Zimmerman, 2001). However, parental documentation status is not considered in determining citizen children's public coverage eligibility, so it should not *directly* affect a child's enrollment in public coverage. There are indeed latent factors at work, as I described earlier.

Parental status is directly and highly relevant for employer coverage, however. Documentation status determines in large part immigrant adults' position in the labor market – whether or not immigrants are able to secure employment, within which industry, the size of firm, and ultimately family income. These factors in turn are directly related to whether immigrants and their families have access to employer-sponsored insurance (ESI). Industry and firm size are strong predictors of ESI offers, and evidence shows that the sorting of citizens and non-citizens into certain industries and firm sizes explains the differences in ESI that exist between these two groups (Buchmueller et al., 2007). It is not the case that non-citizens simply do not take up ESI when offered, but rather that they are much less likely to be offered ESI because of their place in the labor market (Buchmueller et al., 2007). However, as we do not have evidence on ESI offer and take-up rates among undocumented immigrants.

We do know that undocumented immigrants experience equal rates of employment, (Passel, 2009) even in the face of federal restrictions on their ability to work legally. Yet, again, as a direct result of their vulnerable position in the labor market, they are more likely to be in poverty than their counterparts (Passel, 2009). The affordability of ESI is an ever-increasing concern (Dubay et al., 2007), and if children with undocumented parents are more likely to be in poverty, they are certainly less likely to secure ESI. Family income is also an essential factor in understanding access to public coverage. For example, if neither of a child's parents works for an employer that offers coverage, the family may look to Medicaid/CHIP programs to cover their children, where income will determine eligibility. Parental health insurance coverage is also considered

because both parental public insurance and ESI – for the reasons I elaborated on above – are strong predictors of children's coverage (Davidoff et al., 2003).

In addition, there are certain determinants of coverage that are unique among immigrants, including language use and length of time residing in the U.S. (Derose, Escarce, & Lurie, 2007) (see Figure 1.1). Proficiency in English is a significant determinant because a child may face barriers in obtaining coverage if their parent is not able to navigate the system due to language difficulties. However, even if parents face language barriers, there may be other individuals in a household who are able to access and navigate resources. The number of years parents have resided in the U.S. may also influence access to coverage as one would expect that familiarity and ability to navigate the health care system increase the longer families are present.

Beyond these employment- and immigration-related factors are barriers directly associated with parental documentation status. The pathways through which a parent's status may affect their children's access to coverage have yet to be fully uncovered, but I hypothesize that they include the following: the avoidance of institutions requiring state-issued identification, fear of detection and deportation, and stigma associated with their status. As stated earlier, prior research has identified fear of detection as a significant barrier to care for immigrant adults (Berk & Schur, 2001; Cavazos-Rehg et al., 2007; McGuire & Georges, 2003; Park, 2011; Yoshikawa, 2011) and it is likely that the fear experienced by undocumented parents translates into worse access for their children. Additionally, documentation status may prove to be a determining factor in access to ESI – not only due to the measurable factors of employment, industry, firm size, and thus ESI offer and take-up – but for the latent factors of fear and stigma that impede

undocumented immigrants from interacting with institutions that require proof of citizenship/documentation status. For undocumented immigrants in environments where fear is less of a concern, the stigma associated with their documentation status and misinformation regarding children's public program eligibility, for example, may also work as barriers. Even children of legal immigrants are affected by the current policy context, which includes significant restrictions on parents' access to coverage and care and parents' fear that they could be charged for their or their children's participation in public programs in order to remain in the U.S. legally (e.g., becoming a "public charge") (Park, 2011).

Community-level barriers and facilitators

At the community level, several factors interact to restrict or open up access to coverage for children in immigrant families. Parents' social capital within their communities and the availability of immigrant-serving organizations and safety net clinics all determine whether parents are able to connect to the resources necessary for navigating the health insurance system for their children. In addition, in my ecological model (Figure 1.1), fear is situated "between" the family- and community-level layers. Implementation of federal, state, or local immigration policies can deeply shape perceptions of the threat of detection and/or deportation. As a result, entire communities of immigrants may restrict or increase their interactions with institutions.

State-level factors that may facilitate or hinder access play an especially important role in my dissertation. My emphasis on the state level recognizes that the experiences of Latino immigrants across the U.S. are not homogeneous, and thus variations in the relationship between parental documentation status and health insurance coverage are

expected. My primary domain of interest at the state level is immigrant access to public coverage (which is also heavily influenced by federal immigration and health care policy), or the extent to which states grant access to coverage to immigrants excluded from federally funded public coverage. Since PRWORA, states have been forced to take a proactive role in determining eligibility for these excluded groups. Although state-level initiatives to open up or further restrict immigrants' access to public coverage do not directly affect U.S.-born children, the level of access to public coverage for immigrants may reflect public sentiment toward immigrants and/or the degree to which the immigrant community experiences barriers related to documentation status. Therefore, these initiatives may help explain the relationship between parental documentation status and children's coverage. Evidence of this indirect effect of state policies would indicate that they may have consequences for a larger population than that addressed by PRWORA, and would suggest that state initiatives that expand access to immigrants can and do play an important role in minimizing barriers. If mechanisms related to parental documentation status indeed play a role as barriers to care for children, I can expect the effect of parental status on children's coverage to be reduced in states with less restrictive eligibility, or alternatively exacerbated in more restrictive states.

Structural factors

As I describe in detail earlier, overarching structural forces – primarily federal immigration and health care policy profoundly shape access to health insurance coverage for the children of Latino immigrants. In fact, in this section I have demonstrated how they permeate at every level: in determining children's access to Medicaid through the intersection of immigration and health care policy, in constraining parents' ability to

access employment and employer-sponsored insurance, in impeding access to the health care system by the way of fear and confusion about eligibility, and in the state-level policies that emerged in the face of federal restrictions. Finally, documentation status itself is a direct result of (a lack) of immigration policy and therefore any analysis or exploration considering status cannot ignore the structural forces at work.

Contributions

My research contributes to knowledge on access to coverage and care for the children of Latino immigrants by 1) examining the direct and indirect effect of parental documentation status on children's coverage – and, specifically types of coverage – at a national level, 2) employing a research design that integrates the availability of family- as well as state-level data in order to examine interactions between parental documentation status and state policies that either enable or inhibit access, and 3) qualitatively exploring mechanisms underlying the effect of parental status on access to coverage and care.

Contribution to the literature

This study provides innovative contributions to our understanding of the ways in which parental documentation status, and the substantial barriers it implies, hinder access for children – even when most of these children are U.S. born citizens legally entitled to myriad benefits. Previous quantitative work has been limited in rigor and/or generalizability and the evidence base lacks qualitative work directly exploring parental documentation status. My research is innovative in three ways. First, the methodological rigor of my identification strategy allowed me to measure both the direct and indirect effect of parental documentation status on children's coverage within a nationally representative sample. I was also able to observe disparities related to type of coverage,

an important step in order to understand barriers and inform solutions to reduce uninsurance. Second, I incorporated state-level policy data in order to examine interactions between parental documentation status and state policies that either enable or inhibit access. Finally, my use of mixed methods integrated an in-depth exploration of the real, lived experiences of immigrant parents navigating health care for their children in order to better understand mechanisms underlying the relationship between parental documentation status and access to coverage and care.

In particular, I used a validated measure of documentation status (Bachmeier et al., 2014) in nationally representative SIPP data to measure the effect of parental documentation status on coverage among the children of Latino immigrants. Previous studies that have examined only immigrant/non-immigrant disparities and do not consider parental documentation status may mask important disparities that reveal a vulnerable population without access (Brown et al., 1999; Durden, 2007; Huang et al., 2006; Ku & Matani, 2001; Ojeda & Brown, 2005), including U.S. born citizens who should, all things being equal, experience similar coverage rates and access as their peers. Studies that have utilized federal survey data to examine the relationship between parental documentation status and children's coverage are limited in rigor and/or generalizability (Lurie, 2008; Graefe, no year). By modeling the cross-partial effect of children's citizenship and parental documentation status, I was able to estimate gaps in children's coverage and understand the direct and indirect contribution of parental status in these disparities.

By merging SIPP data with state-level health care policy data from the *Kaiser Commission on Medicaid & the Uninsured* (2009), my dissertation further contributes by demonstrating the role of states in either opening up or further restricting access for these

vulnerable children, where policies originally intended to restrict access for immigrant adults ultimately end up restricting access for their children, as well. My use of mixed methods fills a significant gap by combining advancement of knowledge on the relationship between parental documentation status and children's coverage with an in-depth exploration of the real, lived experiences of immigrant parents navigating the health care system for their children – both from their own personal perspective and the perspective of key informants who uniquely understand and participate in the environment in which parents navigate these resources. Integration of these distinct methods provides a deeper understanding than an approach restricted to either method on its own could achieve. Finally, my approach directly addresses a 2009 NIH Health Disparities Research Summit call for multilevel and/or mixed-methods research to begin to address the intricacies of enduring health disparities (Dankwa-Mullan et al., 2010; Ruffin, 2010), as is the case for the coverage disparities experienced by the children of Latino immigrants.

Policy contributions

My focus on the intersection of immigration and health care policy, two of the most critical areas of policymaking in 2015, can inform policy initiatives at the both the federal and state level. States have now begun implementing key coverage provisions of the ACA, and under constrained budgets will be making key decisions on coverage eligibility for the millions of excluded immigrants. Moreover, renewed attention to immigration reform arguably make the estimated 11 million undocumented immigrants one of the most important populations of policy interest in coming years. It is critical that we understand what these individuals' precarious status means for their families,

including the 4.5 million children born in the U.S. to undocumented immigrants, and 1 million children who are themselves undocumented.[5] Moreover, my study directly speaks to the implications of Obama's recent executive order – although it is currently blocked by a court order – to extend provisional status and work permits to *undocumented* parents of *citizen* children, as these families are the primary focus of my dissertation research. My research provides estimates of key measures of access and vulnerability for these families, including but not limited to rates of poverty, labor industry, rates of coverage, number of years in the US, and English language proficiency. Although I look specifically at Latino immigrant families, findings related to parental documentation status will be relevant for the children of immigrants broadly.

Table 1.1. Citizenship and Documentation Status: Definitions.

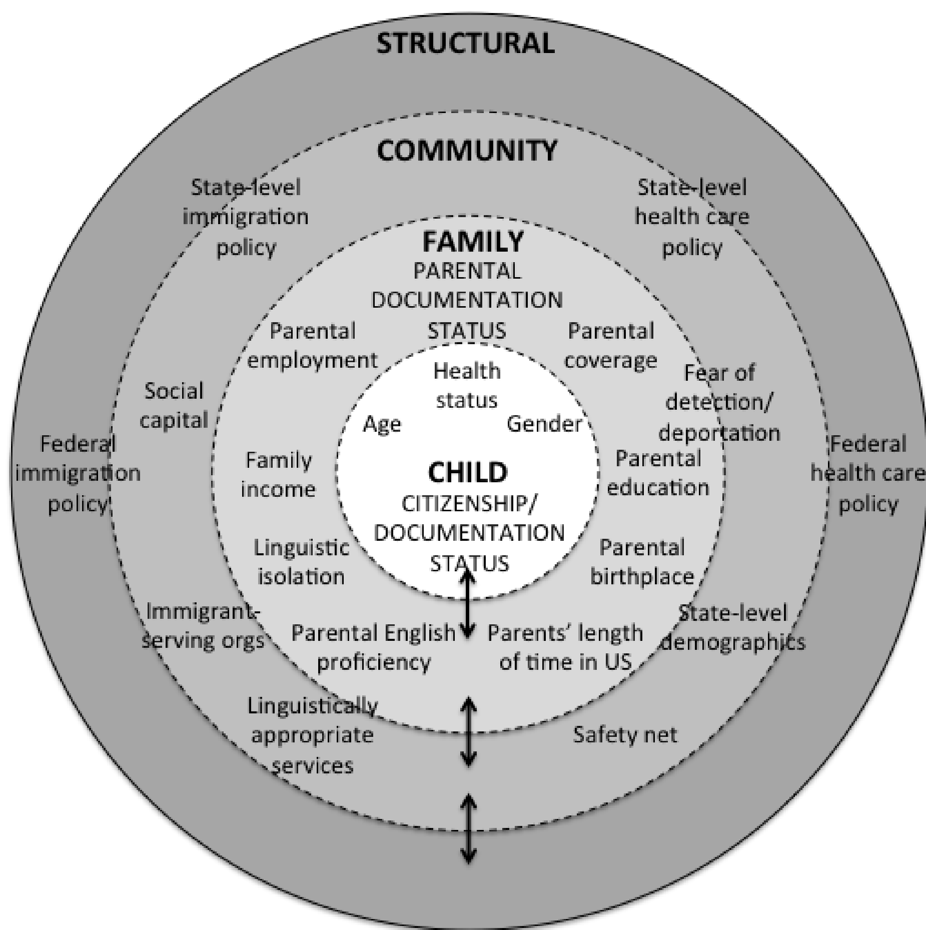
Citizens	
U.S.-born citizens (1):	Persons born in the U.S.
Naturalized citizens (2):	Persons born outside the U.S. who first acquired permanent residence, and subsequently U.S. citizenship
Noncitizens*	
Legal permanent residents (LPRs) (3):	Noncitizens who have been granted permanent residence; possess "green cards"
Undocumented immigrants (4):	Noncitizens who have entered the U.S. without authorization, or violated terms of a temporary admission

***Noncitizens also include asylees, refugees, non-immigrants (individuals in the U.S. on a temporary tourist, student, or work visa), and other immigrants with unique situations. Individuals in these groups may represent a very limited number of noncitizen parents in my sample.**

Table 1.2. Mixed Status Families: Child's Documentation status by Parental Documentation Status

	Parent – Naturalized citizen	**Parent – *Legal permanent resident***	**Parent – *Undocumented immigrant***
Child – *U.S.-born citizen*	Child – *U.S.-born citizen* Parent – *naturalized citizen*	Child – *U.S.-born citizen* Parent – *LPR*	Child – *U.S.-born citizen* Parent – *undocumented*
Child – *Naturalized citizen*	Child – *naturalized citizen* Parent – *naturalized citizen*	Child – *naturalized citizen* Parent – *LPR* NOT LIKELY	Child – *naturalized citizen* Parent – *undocumented* NOT LIKELY
Child – *Legal permanent resident*	Child – *LPR* Parent – *naturalized citizen* NOT LIKELY	Child – *LPR* Parent – *LPR*	Child – *LPR* Parent – *undocumented* NOT LIKELY
Child – *Undocumented immigrant*	Child – *undocumented* Parent – *naturalized citizen* NOT LIKELY	Child – *undocumented* Parent – *LPR* NOT LIKELY	Child – *undocumented* Parent – *undocumented*

Figure 1.1. Access to Coverage for the Children of Latino Immigrants: An Ecological Framework



CHAPTER 2. METHODS

Chapter summary

This chapter includes the analysis plan and rationale for my mixed-methods study design, followed by the methods for AIMS 1-3. The multilevel focus of my conceptual model carries over into my analytic model, as each of my AIMS explores the same question while moving from a national-level analysis to a state-level model and from the state-level to a local-/community-level lens. These layers are inherent in the sequential explanatory design that drives my dissertation, whereas my qualitative **AIM 3** at the local level explains the national- and state-level quantitative findings from **AIMS 1 and 2**. **AIMS 1 and 2** examined parental documentation status and coverage in a nationally representative sample of children of Latino immigrants from the Survey of Income & Program Participation (SIPP). In **AIM 3** I conducted semi-structured interviews with Latino immigrant parents and key community informants. For **AIMS 1 and 2**, I describe the SIPP dataset, discuss how I identified my sample, define measures used in my analysis, and finally review my analytic models. In **AIM 3** methods, I outline sample recruitment, describe the development and refinement of my interview guide, and delineate the iterative data collection and analysis procedure.

Procedures and specific aims

Study design

I use a sequential explanatory design (Creswell & Plano Clark, 2010) to integrate quantitative secondary data analysis in **AIMS 1 and 2** with *subsequent* qualitative data collection/analysis in **AIM 3**, which is both *informed by* and *informs* quantitative

findings. A mixed methods framework can help better explain and understand a phenomenon than reliance on a single approach alone. My particular approach is driven by the pragmatic paradigm that values and draws upon diverse quantitative and qualitative methods to identify the methods that are best suited to answer the question at hand (Morgan, 2007).

AIMS 1/2 allow for generalizations from a nationally representative sample; **AIM 3** provides a rich understanding from the perspectives of a smaller, local (Midwestern) sample of parents and key informants. **AIMS 1/2** quantify and inform general knowledge on disparities in health insurance coverage and related barriers. **AIM 3** probes additional domains of barriers that are better explored in a qualitative framework that permits, in fact encourages, the emergence of new themes and provides an initial understanding of areas for which the literature is more sparse. Finally, the *explanatory* aspect of my study design emerges at the point in which findings from my qualitative approach help explain results from my quantitative models (Creswell & Plano Clark, 2010). Here I maneuver between induction and deduction in this mutually informative framework; hypothesis testing in **AIMS 1 and 2** is integrated with a quasi-inductive approach in **AIM 3** that allows for the emergence of new themes while still operating within a flexible a priori theoretical framework originating from **AIM 1 and 2** findings.

Analytic model

The primary intent of my dissertation is to delineate the relationship between parental documentation status and health insurance coverage. To do so, I begin by estimating differences in uninsurance and type of coverage by parental documentation status, children's citizenship status, and their interaction within a *nationally*

representative sample of the children of Latino immigrants in the Survey of Income & Program Participation (SIPP) in **AIM 1** (see Figure 2.1). Use of this data source allows me to examine a host of barriers and facilitators that affect children's coverage in general (non-financial and financial factors) as well as a number of factors unique to the context of coverage for immigrant families.[7] Most importantly, the SIPP is the only nationally representative survey that includes a measure of documentation status. I hypothesize that *1) compared to noncitizen children, **citizen children** overall will have a **higher** probability of being covered by health insurance – both employer-sponsored insurance (ESI) and Medicaid/CHIP, and 2) **citizen children with at least one undocumented parent** will have a **lower** probability of being covered by ESI and Medicaid than their counterparts with only citizen and/or legal permanent resident (LPR) parents*.

AIM 2 emerges in recognition of the ever-increasing role of states in determining immigrants' access to public coverage, as well as the vast differences in children's uninsurance across states, especially for Latino children (SHADAC, 2012). *State-level* models in **AIM 2** also take into account the fact that immigrant access to coverage and Latino children's uninsurance rates, as well as the experience and context of living in the precarious state of "undocumentedness" (Messias, McEwen, & Clark, 2015) varies greatly across states. While no variables are available in the SIPP to measure these policy- or community-level contextual factors, I am able to include state-level demographics in my model that may correlate with some of these factors, such as the

[7] One non-financial barrier that is certainly related to children's coverage is health status, as I demonstrate in my ecological model (Figure 2.1). However, this measure is not administered in the Wave(s) of data I use and it is not directly correlated with parental documentation status (only perhaps indirectly through coverage and access to care).

percent of the state that is Latino, foreign-born, noncitizen, or undocumented, as well as the percent growth in the foreign-born population over the most recent decade. My hypothesis in **AIM 2** predicts that *state-level policy moderates the effect of parental documentation status*. In particular, I predict that – *in states with* ***more accessible Medicaid eligibility rules for immigrants*** – *disparities in coverage by parental documentation status* ***will be reduced****. Conversely, I hypothesize that* **greater** *disparities in children's coverage by parental documentation status* will be *observed in states with* ***more restrictive Medicaid immigrant eligibility rules***.

Finally, **AIM 3** moves to *the local- or community-level* to explore real life experiences associated with navigating the health care system. The state of being undocumented has social meaning that is difficult to measure in solely quantitative work. Here, I am able to delve into domains that are not amenable to national survey data, such as the stigma and fear related to documentation status, as well as explore contextual factors that influence parents' ability to secure insurance coverage for their children. In addition, AIM 3 enables me to further explore barriers or facilitators examined in AIMS 1 and 2 in order to confirm or compare with quantitative findings. Consistent with much qualitative inquiry, I undertook **AIM 3** with general themes to explore, but I did not enter with a pre-conceived hypothesis about what I would learn. Rather, my motivation was to gain knowledge and insight to help inform findings from **AIMS 1 and 2**.

Procedures

As seen in Figure 2.2, **AIM 1** employs multinomial probit models to examine marginal (parental documentation status) and cross-partial (interaction of parental documentation and children's citizenship status) effects. **AIM 2** runs multi-level models across groups of states classified according to an index of immigrant access to public coverage. In my first point of interface – or the points at which my quantitative and qualitative findings are integrated – findings from **AIMS 1** and **2** inform refinement of the qualitative interview guide for **AIM 3**. Although I initially identified broad themes and core questions to be explored in the semi-structured interviews, my study was designed so that significant relationships and unexpected findings requiring clarification in **AIMS 1 and 2** were used to develop more specific questions for parents and community informants in **AIM 3**.

As I discuss in my qualitative methods section, I received IRB approval to conduct semi-structured interviews with up to 20 Latino immigrant parents and 10 key informants in MN. Ultimately, due to the point at which I reached saturation, I interviewed 14 Latino immigrant parents and six key informants. The final phase of integration of quantitative and qualitative findings has actually taken place throughout my work, but is highlighted in Chapter 6 (Conclusion) in the broad discussion and implications of this project. In addition, I analyzed and interpreted **AIMS 1** and **2** initially (prior to qualitative data collection in **AIM 3**), and then returned to my analyses/interpretations after completion of **AIM 3** for reinterpretation/enhanced meaning. Through this process, I reflected on my initial interpretations and how they were changing as a result of qualitative findings. The format of this dissertation reflects

this process, whereby initial chapters include original analyses/interpretations, with latter chapters presenting and discussing reinterpretations.

My primary intent in using mixed methods is for the qualitative work (**AIM 3**) to inform quantitative findings from **AIMS 1 and 2**, yet I anticipated that findings from each component would be mutually informative, as indeed they were. Each AIM explores a specific relationship within my conceptual model that as a whole offer a better explanation than an approach relying on a single method alone. In fact, while the main direction of my integration was for quantitative findings to help inform the design of my qualitative work and for qualitative findings to then help explain quantitative results, insights in **AIM 3** ended up directly informing and strengthening my analysis in **AIM 2**. These points of integration are evident in two key components of my dissertation:

1. **AIM 1** findings brought to the forefront the importance of ESI as a driving factor behind coverage disparities related to parental documentation status. Therefore, I explicitly revised my interview guide to focus much more time on employment, access to ESI, and potential barriers.
2. Qualitative findings in **AIM 3** spurred me to go back to **AIM 2** analyses, reconsider my immigrant access to coverage index, and run additional models. In particular, insight during the analytic process helped me hone in on state-level prenatal coverage, regardless of immigration status, as a key factor in facilitating coverage for the children of immigrants.

Limitations of my mixed-methods study design

My mixed methods approach used rigorous methods informed by each relationship of interest in my conceptual model, yet there are limitations for which I have sought alternatives when available. The strategy I follow may not be the ideal model for a wholly integrated sequential explanatory design where samples identified for qualitative data collection originate directly from the quantitative sample (Creswell & Plano Clark, 2010). My use of de-identified nationally representative data – essential for answering my research questions in **AIMS 1 and 2** – did not allow me to directly draw a follow-up sample. Instead, I attempted to include similar samples across aims by focusing only on the children of Latino immigrant parents in each and inquiring in **AIM 3** about the experiences of immigrants of varying documentation status, as well as interviewing key informants in order to explore the policy context of **AIM 2.** Finally, while I certainly learned about much more in my qualitative work than just the question at hand, my primary goal was to "answer" a similar question across all three aims, a strategy that methodological expert Creswell recommends to help mitigate threats common to mixed-methods work (Creswell & Plano Clark, 2010). My **AIM 3** findings stay true to this purpose by limiting my "results" and discussion to only the themes, categories, codes that help me understand the relationship between parental documentation status (and children's citizenship) and children's access to coverage.

Quantitative component: AIMS 1 and 2

Data source

The data for **AIMS 1** and **2** originate from the *Survey of Income & Program Participation* (SIPP). The SIPP is a longitudinal nationally representative in-person and telephone survey conducted by the U.S. Census Bureau that follows individuals in households in the civilian, noninstitutionalized population for panels of 3-6 years. As its name implies, its main goal is to collect comprehensive data on households' and individuals' income and participation in public programs, as well as the factors influencing income and program participation. Data are collected in waves every four months, with each wave inquiring about the previous four months. The total number of waves across panels varies; the 2004 panel included 12 total waves and the 2008 panel 15. The SIPP is based on a two-stage probability sample of households (address units within primary sampling units (PSUs)), with an oversample of the low-income population, related to its content focus on public program participation. Once households are identified, the SIPP interviews all persons 15+ within households (while also inquiring about persons under 15), and then follows these individuals, as opposed to households, over the entire panel. The SIPP even follows persons leaving households originally sampled, conditioned on certain geographic restrictions within PSUs across the country. As such, the SIPP is a person-based survey with the initial sample based at a household level. If persons move to a different PSU, the SIPP attempts to continue with in-person interviews; if they move more than 100 miles outside of any PSU where the SIPP is fielded, the SIPP attempts to interview them by phone.

In Wave 1 of the 2004 Panel, 110,462 individuals within 46,500 households were interviewed; 108,863 persons within 42,032 households were interviewed in Wave 1 of the 2008 Panel. As with any longitudinal survey, attrition in the SIPP is a significant concern. Although, uniquely, individuals are allowed to come in and out of waves in order to reduce attrition. Attrition at the time of the last wave of the 2008 Panel (Wave 16) was at 53%;[8] voluntary attrition during the 2004 panel was 37% from Wave 1 to Wave 12. In 2004 the SIPP budget was cut and therefore the sample was reduced significantly (by almost half) at Wave 9 (U.S. Census Bureau, 2008; U.S. Census Bureau, 2014).[9] However, the sample cut was at the level of randomly selected PSUs and so should not systemically bias my sample.

Sample

I pooled data from a cross-section of Wave 12 (data collected from September to December 2007) of the 2004 SIPP panel (*N*=1,260) and Wave 2 (data collected from January to April 2009) of the 2008 SIPP panel (*N*=2,967) (see Figure 2.3). My cross-section for the 2004-W12 sample originated from reference month September 2007, which was collected at different times within the Sep-Dec window, as households are grouped into rotations and interviewed at different times, but always with reference to the previous four months. Therefore, for example, some respondents provided data in reference to September 2007 as the first reference month, while for others it was the fourth reference month. My 2008-W2 sample captured data in reference to December

[8] However, my 2008 Panel Sample is drawn from Wave 2.
[9] This is important for my sample because I observe Wave 12 of the 2004 Panel, and thus sample reduction and attrition could be a concern.

2008, with respondents surveyed from January to April 2009 again depending on their rotation group.

I identified these 4,227 children of Latino immigrants (as opposed to Latino children with immigrant parents) by first identifying foreign-born parents 18 or older who either report Hispanic/Latino ethnicity and/or report Latin America (with some exceptions) as their place of birth. I then select their children under 18, regardless of the child's reported ethnicity or place of birth.

Latino immigrant adults

As described above, broadly, I identified Latino immigrant adults as foreign-born adults (18 or over) who either reported Hispanic/Latino ethnicity and/or reported a Latin American (or, in some cases, a Caribbean) country as their place of birth, with a few important exceptions. First, I identified foreign-born adults as those who were born outside the U.S., but were NOT born abroad to US-born parents. My 2004 Panel-Wave 12 (2004-W12) sample included 3,984 foreign-born adults under this definition; the 2008 Panel-Wave 2 (2008-W2) sample included 10,212 (see Figure 2.4).

Second, I identified which foreign-born adults reported Hispanic/Latino ethnicity (1,538 in 2004-W12 and 3,856 in 2008-W2). My method for selecting additional Latino immigrant adults based on place of birth differed between the 2004 and 2008 panels, given the level of detail available in each. In the 2004 panel, I was able to observe country of birth, while in the 2008 panel only region of birth is available in public-use data. I took several steps to match my selection across the two samples, within these constraints. For 2004-W12 data, I selected an additional 338 foreign-born adults born in the following countries/regions: Mexico, Central America, South America (with the

exception of Guyana and Brazil), Cuba, and the Dominican Republic. For 2008-W2 data, I selected an additional 1,076 foreign-born adults from the following three groups: 1) any foreign-born adults born in Central America (the SIPP erroneously groups Mexico with Central America although it is considered a North American country); 2) foreign-born adults born in South America, excluding adults who reported Portuguese as a language spoken at home so as to match my exclusion of Brazil in 2004-W12 data; and 3) Spanish-speaking foreign-born adults born in the Caribbean, so as to only include adults likely born in Cuba or the Dominican Republic, and not other Caribbean countries.

My decision to include language in the latter two categories is not without limitations, as I may have inadvertently included individuals born in Brazil who did not report speaking Portuguese, or excluded individuals from Cuba or the Dominican Republic who did not report speaking Spanish (or include adults born in other Caribbean countries because they reported speaking Spanish). However, there appears to be minimal overlap,[10] and alternative methods of simply including everyone from South America (or only including Spanish-speaking respondents from South America) and/or excluding everyone from the Caribbean would have been arguably more problematic for accurately identifying adults born in a Latin American country. These two steps of selection

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[10] I used data from the 2004 Panel, where country of origin is provided, to estimate potential bias in my 2008 Panel sample, which relies solely on region of birth. I examined country of birth and language spoken at home for adults born in Latin America (LA) who did not report Hispanic/Latino ethnicity. To assess my decision to exclude Portuguese-speaking adults born in LA, I looked at the number of 2004 Panel respondents who reported speaking Portuguese but were not born in Brazil. Only 1 of 13 adults who reported Portuguese was not from Brazil, and so would have been erroneously excluded from my 2008 Panel sample. On the other hand, 12 of 24 adults from Brazil reported a language other than Portuguese and so would have been erroneously included in my sample. Next, I assessed my assignment decisions from the Caribbean, where I only included Spanish-speaking adults. Of the 2 non-Hispanic/Latino adults from Cuba, only one reported speaking a language other than Spanish. Of the 26 non-Hispanic/Latino adults from the Dominican Republic, only 9 reported speaking at a language other than English at home. In both scenarios these respondents would have been excluded. Conversely, of the 23 adults born in the Caribbean who did not report Hispanic/Latino ethnicity, 5 of them are not from Cuba or the Dominican Republic and so would have been erroneously included. Finally, it is also possible that some adults meeting these criteria were in fact rightly included in my sample if they were the spouse or partner of a Latino immigrant parent.

(ethnicity and country/region of birth) identified a total of 1,876 Latino immigrant adults in my 2004-W12 sample, and 4,932 in 2008-W2.

Latino immigrant parents

I then identified Latino immigrant parents as parents with children under 18 years old in the household. I present Ns at each step by first presenting the number from the 2004-W12 sample, followed by the corresponding 2008-W2 sample in parentheses. This first step selected 516 (1,253)[11] foreign-born Latina mothers and 439 (1,043) foreign-born Latino fathers (these numbers do not match final numbers in Figure 2.4 due to the exclusion rules I describe here). Next, I excluded parents whose children were themselves married or had children of their own (if the parent had other children in the household who were not married and/or did not have children of their own, they were retained). In addition, if the child was the adopted or stepchild of the sole or both Latino immigrant parent(s), they were excluded from my sample. For example, if a child had two parents and only one was a Latino immigrant, and they were the adopted/stepchild of the Latino immigrant parent, then for my purposes I did not consider them a child of a Latino immigrant parent. However, under a similar scenario, if they were adopted only by the parent who was not a Latino immigrant, I included them. If they were adopted by both parents in a two-Latino immigrant parent household, they were not included. I followed similar rules for stepchildren.[12]

These restrictions removed two (eight) Latina immigrant mothers (for a total of 514 (1,245)) and three (eight) Latino immigrants fathers (for a total of 436 (1,035)).

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[11] In this section, I first report sample size from 2004-W12 data, followed by 2008-W2 data in parentheses.
[12] Of 10,437 (25,168) total children under 18 the SIPP sample, 28 (58) were married and/or had children of their own, 206 (542) were excluded due to adopted/stepchild restrictions, and 579 (1,083) had no parent in the household, leaving 9,624 (23,485) “eligible” children.

Finally, two (three) mothers and three (two) fathers were removed because of nonsensical family relationships reported in the data, leaving 512 (1,242) Latina immigrant mothers, 433 (1,033) Latino immigrant fathers at this stage. Next, I included parents who were not Latino immigrants if they were the spouse/partner of the Latino immigrant parent. This added an additional 169 (360) parents, for a total of 1,114 (2,635) "sample" parents: 945 (2,275) Latino immigrants parents + 169 (360) other.

Children of Latino immigrants

From these parents, I identified 4,227 children of Latino immigrants. Again, as seen in Figure 2.3, this included 1,260 from the last wave of the 2004 Panel and 2,967 from the 2nd wave of the 2008 Panel. Among these children, 1,054 (2,499) had a Latina immigrant mother, 929 (2,117) had a Latino immigrant father, and 720 (1,635) children had both.

My sample size is comparable to (in fact, larger than) Lurie's (2008) study of coverage using the same documentation status variables in the SIPP to examine children by similar parental status/child's status interactions. Lurie was able to detect statistically significant differences in coverage of substantial magnitude (between 7 and 17% at the 95% confidence level or better) between these groupings.

Measures

In addition to core data including demographic characteristics and health insurance collected in all waves, the SIPP conducts topical modules at nearly every wave that inquire about additional topic areas. The topic areas change with each wave and across panels. The migration history topical module, which includes the measures of documentation status, has been administered in the 2nd wave of each panel since the 1996

Panel. Apart from documentation status – which I discuss in greater detail below, this topical module inquires about region or country of birth, inter-state, and international migration – such as the date of the respondent's most recent move and the date in which foreign-born respondents moved to the U.S. For the 2004 panel, although my analysis included demographics and health insurance data from the 12th wave, I merged on documentation status from the 2nd wave of the 2004 panel (conducted from June to September 2004) (see Figure 2.4). Because the migration history topical module is only conducted in Wave 2, I was limited to this option. However, documentation status is a variable that I expected to vary insignificantly over time (Jeffery & Mongers, 2008). While it is possible that some parents would have adjusted their status between 2004 and 2007, my analysis operates under the assumption that this is a negligible proportion of my sample.

Individual-level measures

Independent variable: Child's citizenship status. I assigned children's citizenship status (citizen vs. noncitizen) based on three parent-report measures asked in the core waves for all respondents in the SIPP sample. First, respondents were asked whether children were born in the U.S. or a U.S. territory. For children who were not born in the U.S. parents were then asked whether children were U.S. citizens. For U.S. citizens not born in the U.S., a subsequent measure asked whether children were born abroad to U.S. citizen parent(s), adopted by U.S. citizen parent(s), have naturalized, or gained citizenship through military service. For noncitizens, no further information is collected in the core waves; rather, measures implemented in the migration history topical module gather more detailed information from noncitizens. Although these measures permitted

me to distinguish between U.S.-born citizen, naturalized citizen, and noncitizen children, due to sample size restrictions I limit this variable to citizen vs. noncitizen. Furthermore, past research on coverage disparities by children's citizenship status have demonstrated that *naturalized* citizen children experience rates of coverage on par with their *U.S.-born* citizen counterparts.

As seen in Table 2.1, 3739 children – or 89.6% of my weighted sample were citizens. The other 10.4% (or 488 children) were noncitizens. The overwhelming majority of citizen children were born in the U.S. (97.7%), while the other 2.3% (86 children) were naturalized citizens (not shown).

The ability to observe children's citizenship status – a crucial step for identification of my model – is a significant strength of my project, as I've discussed in Chapter 1 (Background). Prior to the 2004 Panel, nativity and citizenship status were asked only of respondents a*ge 15 and over*, complicating analysts' ability to identify citizen vs. noncitizen children. Fortunately, in both the 2004 and 2008 Panels, I can observe both of these for children of all ages, preventing me from needing to infer children's citizenship status as required in studies using data from past panels. Documentation status is still only asked for noncitizen respondents over age 15. While I had originally intended to assign documentation status to noncitizen children – in order to estimate rates of uninsurance across distinct groups of children – for reasons outlined below I ultimately did not include children's status beyond the citizen vs. noncitizen distinction directly available in the data.

I planned and implemented an algorithm to assign documentation status to children based on either/both parents' status. However for two reasons I did not trust

these assignments, and most importantly came to the realization that I was not able to run my primary interaction between parental documentation and children's status if either status represented more than a binary indicator (I discuss this latter restriction in greater detail below). The main reason I was not confident in my ability to assign documentation status for children 14 and under was the fact that 19% of noncitizen children reside in single-parent households; not being able to observe the other parent's status severely limited my ability to assign the child's documentation status.

Independent variable: Parental documentation status. As I mentioned briefly above, the migration history topical module administered in Wave 2 asked detailed questions of noncitizens over age 14, including whether individuals were legal permanent residents (LPRs) when they entered the country (and for those who were not whether they have adjusted their status) and the year in which they arrived to the U.S. (as well as the year they adjusted their status to LPR if applicable). I used these measures – coupled with citizenship measures in core waves – to create four categories of citizenship/documentation status for parents: 1) U.S.-born citizens, which was only possible among non-Latino immigrant parents; and among immigrant parents: 2) naturalized citizens, 3) legal permanent residents (LPRs), and 4)undocumented immigrants (see Figure 2.5).

First, 150 (326) sample parents who were either born in the U.S. or born outside the U.S. to U.S. citizen parents were categorized as US-born citizens.[13] Next, 275 (641) parents who became citizens through naturalization, military service, or adoption were

[13] As I describe above, U.S.-born parents were included in my sample only if they met the condition of being the parent of a child whose other parent is a Latino immigrant (e.g., the spouse/partner of a Latino immigrant parent).

categorized as naturalized citizens.[14] A total of 389 (1,015) parents were assigned as legal permanent residents based on a number of considerations. Two hundred ninety-seven (763) parents were LPRs at the time of their arrival to the U.S., and 89 (246) who did not enter as LPRs had since adjusted their status. In addition, three (six) parents were assigned as LPR based on their occupational status, receipt of public benefits which require legal status, or the year in which they entered the U.S.,[15] even though they had not reported adjusting their status to LPR since arriving. These logical edits to legal status are a common practice utilized by Passel and a number of other migration demographers (Capps et al., 2013; Judson & Swanson, 2011). Following Judson's approach (a leading expert in migration demography), 196 (641) noncitizen parents were categorized as undocumented because they reported that they had not entered the U.S. as legal permanent residents and had not adjusted to legal permanent resident since arriving, nor did they meet any of the logical edits for legal status (Judson & Swanson, 2011). Finally, I made logical edits to status in a limited number of families where I identified nonsensical relationships between family members' varied documentation status. For example, I observed families where both parents had reported that they were U.S. citizens, but their children were noncitizens. I evaluated these families on a case-by-case

[14] A common method among migration demographers (originated by Passel, Van Hook, & Bean, 2004) is to edit potential cases of misreport of citizenship status. To mitigate this misreport, demographers often move to undocumented status those respondents who report that they are naturalized citizens, but also report having arrived in the U.S. less than 3 years ago. This edit is implemented because it is impossible to naturalize in less than 3 years. Although this does seem to be a logical editing routine, the SIPP measure on time of arrival to the U.S. differs from this measure in other national surveys (e.g., Current Population Survey, American Community Survey). While other surveys explicitly ask respondents when they *first* entered the U.S., the SIPP only asks respondents when they had most recently entered the U.S. Thus, the SIPP time of entry measure would not account for many immigrants who periodically enter, leave, and re-enter the U.S., reducing my confidence that this measure captures the longer period of time they may have resided in the U.S. Consequently, I do not implement this edit.

[15] Legal status logical edits changed to legal status those with occupations requiring legal status, such as lawyers, health care workers, and other licensed, government-related security jobs, those who were state or federal government workers, those who received public benefits other than Medicaid (e.g., cash benefits), and those who had arrived in the U.S. before 1982 (as undocumented immigrants arriving before 1982 were eligible to adjust their status under the Immigration Reform and Control Act (IRCA) of 1986 (Pub L No.99-603).

basis, using the conservative approach of not altering status when possible. When two distinct, logical possibilities for editing status existed, I attempted to introduce randomness to my assignment process by flipping a coin to determine final status (for 2 cases).

A few other groups of noncitizens could have fallen under those who did not enter as legal permanent residents and had not adjusted their status. For example, a small proportion of noncitizens reside in the U.S. under temporary visas (e.g., students, workers, referred to as non-immigrants), but only about 2% of Latino noncitizens are non-immigrants (Baker, 2009; Gonzalez-Barrera & Lopez, 2013). In addition, refugees and asylees do not enter as legal permanent residents, but are allowed to apply to adjust their status within one year of the arrival (or within one year of being granted asylum, as asylum is granted once immigrants are already in the U.S.), so many in my sample should have already adjusted their status to legal permanent resident.[16] Thus, considering the small proportion of these persons within the larger Latino noncitizen population, it is highly likely that the majority of this group is actually undocumented. Furthermore, all studies I have referenced (which should encompass all studies to date on this topic), utilize a similar measure (from the SIPP or the California Health Interview Survey (CHIS)) where respondents are asked whether they are a U.S. citizen or legal permanent resident. After some logical edits similar to those I employ here, those remaining are considered undocumented in most studies and nonpermanent resident in fewer. Interestingly, this caveat is not even discussed by most study authors (Flores et al., 2006;

[16] The Office of Immigration Statistics estimates the application time to adjust status to legal permanent resident is 2.2 years for refugees and 4.4 years for asylees. Some refugees and asylees who have adjusted to legal permanent resident will not be subject to the 5-year ban. However, again, refugees and asylees make up a relatively small proportion of the group of legal permanent residents adjusting in the past 5 years, especially when only looking at Latino immigrants in particular (Baker, 2009).

Guendelman et al., 2005; Lurie, 2008; Stevens et al., 2010; Weathers et al., 2008; Ziol-Guest & Kalil, 2012). Only a single author exploring this relationship (Graefe, no year) mentions this, which she is able to overcome by using restricted SIPP data that allow users to see whether respondents entered as legal permanent residents, refugees, or non-immigrants. The public use data I use here did not allow observation of these distinctions, but did provide much more information than any other national survey.

Finally, by observing both fathers' and mothers' documentation status, I attached parental documentation status to individual children. First, I created a binary indicator variable that indicated whether children had at least one parent who was undocumented. Children without at least one parent who was undocumented were those children who had only citizen or LPR parents. As I describe below, this binary indicator was created out of necessity in order to be able to examine the interaction between parental documentation status and children's citizenship status for the full sample. Second, for an ancillary model in which I examined citizen children only, I was able to take a more fine-grained approach that included four categories of parental documentation status along a continuum of access and vulnerability.

Research published within less than two months of my dissertation defense date (and almost one year after I had first conducted my ancillary analysis) provides evidence of the limitations of a binary approach that requires "anchoring" parental status to either the least restrictive status of either parent or the most restrictive status (as is the case for my binary variable) (Oropesa, Landale, & Hillemeier, 2015). In particular, Oropesa et al. demonstrate that such an "anchoring" method can bias estimates by either masking the resources and access available for children with at least one naturalized citizen or LPR

parent, or masking the vulnerability experienced by children with two undocumented parents. I argue that my two-parent approach can help us understand both access and vulnerability, without masking these important scenarios.

For my first analysis in which the primary interest is measuring the interaction between parental documentation and children's citizenship status, I was limited to a binary variable that indicated whether children had at least one parent who was undocumented or only had citizen/legal permanent resident parents. This broader classification was necessary in order to observe the interaction with children's citizenship status because the finer categories would have restricted children's citizenship status to certain parental categories.[17] For example, children with two citizen parents could only be citizens themselves, but by grouping children with citizen or legal permanent resident parents, I was able to observe both citizen and noncitizen children, allowing for estimation of this interaction. The converse of this scenario demonstrates why I only observed citizen children in my ancillary model looking at a more detailed parental documentation status.

Table 2.1 displays the interaction of parental documentation status and children's citizenship status for my analytic sample in AIM 1. Underlined percentages are weighted estimates of the breakdown of children's citizenship status by parental documentation status. *Percentages in italics* are weighted estimates of the distribution of parental documentation status for citizen vs. noncitizen children. Along with these estimates, I present the *n* or sample size for each cell. First, we see that 28% of all children have at

[17] My interest in this interaction also limited me to children's citizenship status, as opposed to children's documentation status, because all undocumented children would have ended up in the parental documentation status category of having at least one parent who is undocumented. This would have been the case because if children only had citizen or LPR parents, they would have been naturalized or granted LPR status through their parents, and thus no children in this category would have been undocumented.

least one parent who is undocumented; ranging from 26% of citizen children to 49% of noncitizen children. Conversely, 82% of children with at least one undocumented parent are U.S.-born citizens, compared to 93% of children with citizen/LPR parents.

In my ancillary model where I only observed citizen children in order to examine parental documentation status across four more meaningful categories, I also needed to restrict to children in two-parent families. The necessity of this additional restriction will be elucidated in my description of this assignment process (see Figure 2.6 for details). This process essentially breaks down the two categories of my binary indicator variable into two categories each for a total of four categories that better reflect the socially constructed meaning of these categories and thus how parental citizenship and documentation status influence children's access to coverage. The first category in my binary indicator combines all children with citizen and LPR but no undocumented parents. I break up this larger group into two groups of parental documentation status: 1) both parents are citizens, 2) or at least one parent is an LPR (noncitizen) but neither parent is undocumented. Similarly, as opposed to grouping all children with at least one undocumented parent together again, I create two more categories: 3) one parent is undocumented (and the other is a citizen or LPR)), or 4) both parents are undocumented. I restrict the ancillary aim to two-parent families in order to make the distinction between the third and fourth categories. Specifically, I wanted to have available an equal set of potential parental resources for all children to move beyond comparing, for example, the child of an undocumented single mother to a child with an undocumented mother and legal permanent resident father, as I am limited to when using my binary indicator variable.

Overall, 24% of children in my weighted sample of citizen children of Latino immigrants in two-parent families had two citizen parents. Half had at least one noncitizen but no undocumented parent. Another 26% of children had at least one undocumented parent; among these children, 12% had one undocumented parent and 14% had two undocumented parents (see Figure 2.6).

Limitations of parental documentation status measure. Ninety-two parents from Wave 12 of the 2004 panel (or 3.1% of total "sample" parents) did not complete the 2nd Wave (core and migration topical module) and so were missing documentation status. These parents started the panel at Wave 1 and missed the 2nd wave, but eventually completed later waves, including Wave 12, the main unit of analysis for my 2004 panel cross-section. Over half of the parents missing status in the 2004-W12 sample were missing because they had not yet joined the SIPP sample when the migration topical module was administered in the second wave of the 2004 panel in 2004. Other parents had started the SIPP in the first wave, but did not complete the second wave. As mentioned above, for retention purposes SIPP participants are allowed to come in and out of waves. Having not completed the wave entirely leads to missing data, whereas if parents had completed the wave but refused to answer specifically the migration-related questions these values would have been imputed by the Census Bureau, as I discuss in the subsequent paragraph. I used logical edits and hotdeck imputation to impute missing status for these parents.[18] Sensitivity testing to evaluate the effect of excluding these

[18] I used ten variables for hotdeck imputation (Andridge & Little, 2010): age, whether the household had moved recently, # of persons in household, presence of unrelated persons in household, presence of adult citizens in household, # of workers in household, renter status, linguistic isolation, state, and income. Place of birth would have been an informative for our imputation model, yet it was missing for these parents as that was also asked in the Wave 2 migration topical module. Six rounds of imputation were needed to fully impute status. We also used the above

families showed similar patterns of direction and significance across all models. I discuss these analyses in Chapter 3 (AIM 1 Findings & Discussion) and include them as an appendix.

An additional potential limitation relevant to the SIPP documentation status variables is the fact that the Census Bureau imputes (hotdeck) values for about 14% of foreign-born respondents (18% among my sample of Latino immigrant parents). Yet, given the sensitivity and risk inherent in this question, there will likely always be a relatively high level of non-response. Although of an arguably less sensitive nature than documentation status, even income – a commonly used predictor of insurance coverage – often suffers from an imputation rate of 20-40% in many surveys (Moore, 2000). Furthermore, recent work from Bachmeier et al. (2014) validates the documentation status measures by, 1) demonstrating that estimates from these measures align well with other nationally representative estimates of undocumented immigrants and their characteristics, and 2) providing evidence that these questions do not lead to differential non-response for respondents most likely to be undocumented (Bachmeier, Van Hook, & Bean, 2014). I again ran sensitivity testing to assess the effect on estimates and variance estimation of including or excluding children in families with imputed parental documentation status and find that excluding these families actually increases coverage disparities related to parental documentation status, in the same direction and level of statistical significance as the model results presented here. I also discuss these analyses in Chapter 3 (AIM 1 Findings & Discussion) and include them as an appendix.

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variables with addition of imputed documentation status, minus # of workers, to impute whether these parents arrived in the country more or less than 5 years ago.

Dependent variable: Health insurance coverage. As seen in Table 2.2, measures of children's coverage are point-in-time (September 2007 for 2004-W2 data and December 2008 for 2008-W12 data). I identified children with employer-sponsored insurance (ESI), other private coverage, (direct purchase or other), public coverage (Medicaid/CHIP), or no coverage (uninsured). ESI included coverage through a current employer, Tricare, other military, VA (Veteran Affairs), or COBRA. Respondents who reported both private and public coverage (103 children, or 3.1% of my weighted sample) were assigned to their respective private coverage (ESI or other). In sensitivity analyses I merged data from additional months and waves to observe whether a child had coverage for any of the four months within the wave from which my data originate or over a period of 12 months. Although point estimates were very different due to the wider time frame and thus higher opportunity to have had coverage during at least one month in that time frame, the relationship between child's citizenship and parental documentation status and coverage remained the same across unadjusted and adjusted models (results available upon request).

For analysis of Medicaid participation (% of eligible children enrolled in Medicaid), I estimated which children were eligible using year- and state-specific eligibility per a) family income as % federal poverty guidelines and b) categorical immigrant eligibility. Data for both conditions were based on Kaiser Commission on Medicaid and the Uninsured (KCMU, 2009) reports.

Covariates. Covariates include individual- and family-level factors and were categorized as non-financial barriers/facilitators: child's age, gender, and metro/non-metro status; immigration-related barriers/facilitators: parental English language

proficiency, parents' length of time in U.S., and household linguistic isolation; socioeconomic barriers/facilitators: family income, parental education, parental insurance coverage, parental employment (including industry and firm size).

Here in the text, I only provide descriptions of covariates that require more explanation than that included in Table 2.2.

- Geography: determined as either metropolitan or non-metropolitan according to Census guidelines; the Census defines metropolitan as metropolitan statistical areas (MSAs) or urban areas with more than 50,000 people (Census Bureau).
- Parental English language proficiency: I selected the highest proficiency between two parents or the proficiency of one parent when only one parent is in the household. In the SIPP, those who reported speaking a language other than English in the home were asked how well they spoke English (very well, well, not well, not at all). Those speaking English very well or well were designated as proficient, as were those who only report English in the home. My final analytical variable indicates whether at least one parent speaks English well or very well.
- Household linguistic isolation: a variable created by the U.S. Census Bureau to identify those households where no one over age 14 speaks English very well or well.
- Family income as a percentage of federal poverty guidelines (FPG): measured as a percentage of FPG set by the Department of Health & Human Services. I created an aggregate variable adding up the income (personal earnings, assets, means-tested cash transfers, and other income) of all members of the HIU (health insurance unit: parents + children, no extended family included). I observed the HIU because this is the unit that most closely matches what would be used for determination of health insurance

eligibility. For example, eligibility guidelines for Medicaid/CHIP consider family ties, especially for children and families; and ESI coverage is often only available to an employee's spouse and child dependents (SHADAC, 2012).

- Parental industry: assigned using data on industry as related to levels of ESI offer (according to national ESI offer rates from 2009 Medical Expenditure Panel Survey – Insurance Component data (AHRQ, 2010a)). Final categories were: 1) at least one parent employed but only in low-ESI-offer industry (agriculture/ forestry/fishery, construction, other services); 2) at least one parent employed, but only in mid-ESI-offer industry (transportation/public utility, retail trade, professional services); and 3) at least one parent employed in high-ESI-offer industry (manufacturing/mining, wholesale trade, finance/insurance/real estate, military).
- Parental firm size: classified as the highest firm size between parents in the following categories: 1) no parent employed, 2) less than 25 employees, 3) 25-99 employees, and 4) 100 or more employees. These categories reflect a recoded SIPP variable that only provides breakdowns at these levels.

State-level measures

Immigrant access to public coverage (access index). In this index, using 2007-2008 data from a survey of states conducted by the *Kaiser Commission on Medicaid & the Uninsured*, I first considered access to coverage for pregnant women and children separately – as these are the main two groups states have covered under PRWORA restrictions – and then created a "ranking" based on combined categories of access. As seen in Table 2.3, I first considered which states offered public coverage to all income-eligible pregnant women excluded from federal funding due to immigration status (legal

residents in U.S. < 5 years AND undocumented), which only covered legal resident pregnant women subject to the 5-year ban, and which states offered no coverage for any excluded pregnant women (KCMU). I then evaluated similar categories for excluded immigrant children before combining these 6 categories into 4 categories of access (see Table 2.4): 1) all immigrant children and pregnant covered (4 states + DC); 2) all immigrant pregnant women and legal resident children under 5-year ban covered (4 states); 3) all immigrant pregnant women OR legal resident pregnant women and children (16 states); and 4) none of these populations covered (25 states).

Covariates. Individual-level covariates in **AIM 2** are the same as the covariates included in **AIM 1.** As seen in Table 2.2, state-level covariates included state-level demographics (% Latino, % foreign-born, % growth in foreign-born population since 2000, % noncitizen, and % of foreign-born population that is undocumented) from the Pew Hispanic Center.

Analysis

Table 2.5 provides an overview of the various analyses I conduct in AIMS 1 and 2. For each analysis, I provide the universe of children, the categorization of parental documentation status, the health insurance coverage variable(s) examined, the model, the sample size, an indication of which tables correspond to each analysis, and notes with any other important observations. Table 2.5 also displays the various sensitivity analyses I have conducted, as I describe earlier. This table is meant to walk the reader through each analysis and table, with references to both the methods and results chapters.

AIM 1: Estimate the marginal effect of child's citizenship status, parental documentation status, and their interaction on insurance coverage among the

children of Latino immigrants. In other words, my objective in AIM 1 is to estimate gaps in children's coverage by children's citizenship and parental documentation status. First, I used probit models[19] to estimate the probability that a child is insured. Then, I ran multinomial probit models to estimate the probability that a child was covered by each type of coverage (ESI, other private, Medicaid/CHIP), compared to uninsured. Multinomial probit allows for the use of categorical variables in logit regression models by estimating coefficients for each indicator compared to a reference or "base" outcome. In my case, this means I obtained three full sets of coefficients, one for each of type coverage compared to uninsured.

For both probit and multinomial probit models, I transformed these coefficients into predicted probabilities and sample average marginal effects (ME) using the margins command in Stata 13.0. The sample average marginal effects – the default in Stata – calculates the ME for each case at its own values of all covariates and takes the average of these ME, thus allowing ME to be estimated without assuming fixed values across cases. A cross-partial model allowed me to examine the interaction of parental documentation status and child's citizenship status, specifically, how parental documentation status altered the effect of the children's citizenship status. The inclusion of these interaction effects in nonlinear models is not as straightforward as within linear models. Fortunately, experts offer guidance on the computation and interpretation of

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[19]Multinomial logit models, another option I considered, must pass the test of "independence of irrelevant alternatives" (IIA); my models predicting type of coverage failed this test. This was not surprising, though, as this test is meant to discern whether "the odds of preferring one choice over another do not depend on the presence or absence of other irrelevant alternatives" (Hausman & McFadden, 1984). Certainly with health insurance we would expect that individuals' preference would change depending on what other sources of coverage were available (e.g., ESI vs. Medicaid). Fortunately, multinomial probit models are not constrained to IIA. Thus, I run multinomial probit models, and to remain consistent across models, also use probit in binary models.

these effects (Karaca-Mandic et al., 2010), which I followed here. Standard errors for the marginal effects were calculated using the Delta Method, as is appropriate for examining marginal effects in nonlinear models (Karaca-Mandic, Norton, & Dowd,). Survey (svy) commands were used in all models to account for the SIPP's complex survey design. Outcomes were modeled as follows:

$\text{probit}(\Pr[Y=1 \mid X_{1,k}])= \beta_0 + \beta_1 X_1(\text{child_ status}) + \beta_k X_k$,

where X_k is a vector of covariates.

$\text{probit}(\Pr[Y=1 \mid X_{1,k}])= \beta_0 + \beta_1 X_1(\text{parent_ status}) + \beta_k X_k$,

where X_k is a vector of covariates.

$\text{probit}(\Pr[Y=1 \mid X_{1,k}])= \beta_0 + \beta_1 X_1(\text{child_statusXparent_ status}) + \beta_k X_k$,

where X_k is a vector of covariates.

The marginal effect of X_1 was then calculated as follows:

$\partial P(Y=1 \mid X_1)/\partial X_1=P(Y=1 \mid X_1=1 , X_k) - P(Y=1 \mid X_1=0 , X_k)$.

I also ran models that used only mother's and then only father's status as a predictor for sensitivity analyses. Mothers are most often the "navigators" of health coverage and care for their children (Halfon et al., 1995), but fathers in my sample are much more likely to be employed and thus access to coverage (ESI) may be more dependent on the father's documentation status. Both mother's and father's status worked in the same direction and of almost the same magnitude as my combined parental documentation status variables (results available upon request).

AIM 2: Examine state policy on immigrant access to public coverage as a moderator in the relationship between children's insurance coverage and parental documentation status. I hypothesized that the effect of parental documentation status

was modified by my index of state policy on immigrant access to coverage, and separately by whether states offer prenatal coverage to undocumented immigrants.

Prior to running multivariate models estimating children's probability of being insured, I examined bivariate distributions to assess my hypotheses on a crude level. I am limited computationally to examining insurance vs. uninsurance in these models testing my index. However, in AIM 1 I find that the differences in uninsurance by parental documentation status are driven primarily by differential access to ESI and therefore I wanted to assess whether differences in uninsurance by parental documentation status and across my index were driven by gaps in ESI, Medicaid/CHIP, or both. As I report in Chapter 4 (AIM 2 Findings & Discussion), in examining the coverage distribution, I discovered that – somewhat in line with findings from AIM 1 – the differences in uninsurance by parental documentation status across my index were driven by differences in both Medicaid/CHIP and ESI. At every level of my index Medicaid rates were significantly higher for citizen children with at least one undocumented parent than for children with citizen/LPR parents, while the converse was true for ESI. Differences in ESI were so large that at nearly every level of the index they canceled out the positive association between having at least one undocumented parent and having Medicaid/CHIP. This was not surprising given my findings in AIM 1, but what was really of interest in AIM 2 was how the effect of parental documentation status varied across my index.

To discern this, I looked at the Medicaid/CHIP and ESI rates across each level of the index, and examined how these contributed to the overall uninsurance disparity. As I describe in Chapter 4 (AIM 2 Findings & Discussion), no clear pattern emerged, as rates

of both types of coverage varied across the index. To account for differential poverty rates by parental documentation status, as I discuss in Chapter 3 (AIM 1 Findings & Discussion)), I also restricted my sample to only those citizen children who I estimated to be eligible for Medicaid and found that differences in both Medicaid/CHIP and ESI contributed to uninsurance disparities.

These bivariate results are certainly intriguing on a broad level and provide insight for future state-level analyses. However, my immigrant access to public coverage index is entirely driven by Medicaid/CHIP policy. Because in these models I am limited to estimating only the probability of being insured (not type of coverage), it would be difficult to argue conceptually that my index moderates the relationship between parental documentation status and uninsurance when gaps in insurance are driven almost entirely by differences in ESI. Therefore, I do not run multivariate models testing my full immigration access to public coverage index.

However, as I have alluded to earlier in this chapter, insight from parent and key informant interviews in AIM 3 has somewhat modified my thinking on the role of state-level health care policy in the relationship between parental documentation status and children's coverage. As I explain in my conceptual model, I saw my original access index as essentially a proxy that measures the degree to which immigrant parents navigating the health care system experience barriers related to their documentation status or a reflect of public sentiment towards immigrants within states. The policies included in my index do not *directly* affect U.S.-born citizen children, as they all address immigrants' access to coverage, but I had hypothesized that these policies would alter the effect of parental documentation status on children's coverage. The five policies I used to create my index

address immigrant children's and pregnant women's coverage (see Table 2.3). However, during parent and key informant interviews I consistently heard that most undocumented parents were not hesitant or fearful of enrolling their children in *Medical Assistance* (MA, Minnesota's Medicaid/CHIP program) because mothers themselves had enrolled in MA during pregnancy and thus their newborn children were automatically enrolled in MA, as well. Some mothers did report confusion or hesitancy when first enrolling in MA when they were pregnant, but because they secured this coverage before their children were born, they did not experience barriers related to their status for their children's coverage.

This insight prompted me to come back to and reconsider my access index, leading to my decision to model policy related to prenatal coverage for undocumented pregnant women alone as the key moderator in the relationship between parental documentation status and children's coverage. Just as with my original index, I hypothesized that in states that cover pregnant women regardless of immigration status the effect of parental documentation would be mitigated, and conversely exacerbated in states that do not. My models follow those I had proposed in my dissertation proposal, with some modifications and additions. I first tested my hypothesis by employing a hierarchical random coefficients model (with both fixed and random effects using gllamm and meprobit in Stata) to examine an interaction between state policy (at j^{th} level) and parental status (for i^{th} child in j^{th} state). The multi-level models I present here reflect separate equations at the ith (individuals within state index categories) and j^{th} (state) levels. The first equation is a probit model at the ith level, subsequent equations are modeled at the jth level. The separate equation for β_{1j} leads to a cross-level interaction between parental status and state policy (Singer, 1998). If the first parameter estimated in

each cross-level equation was significant (Singer), my hypothesis that the effect of parental status is moderated by state policy is supported.

$$\text{probit}(\Pr[Y_{ij}=1 \mid X_{i,j}]) = \beta_{0j} + \beta_{1j}\text{parent_status}_{ij} + \beta_{kj}X_{kij} + \varepsilon_{ij},$$

where X_{kij} is a vector of individual-level covariates.

$$\beta_{0j} = \alpha_{1j}\text{index}_j + \alpha_{kj} + \varsigma_{0j}$$

$$\beta_{1j} = \gamma_{1j}\text{index}_j + \gamma_{kj} + \varsigma_{1j},$$

where W_{kj} is vector of state-level covariates.

I also ran one-level models using svy: probit in order to compare these results with my multi-level models. I discuss the details of estimation in Chapter 4 (AIM 2 Findings & Discussion).

As seen in Table 2.4, the sample for **AIM 2** was restricted to the citizen children of Latino immigrants in 30 states with sufficient sample size for multi-level modeling (Bell et al., 2010) and no cells with zero observations for parental documentation status by children's citizenship status. Under these restrictions a total of 3,615 children were included.

Qualitative component: AIM 3

The qualitative component of my dissertation consisted of semi-structured interviews with 14 Latino immigrant parents of varied documentation statuses and 6 key community informants who were from and work in the Latino immigrant community. My interviews covered six key themes related to children's access to Medicaid/CHIP coverage, ESI, and ultimately access to care, as well as parents' own access to coverage and care. Data collection and analysis reflected an iterative process within a quasi-

inductive framework to identify these major themes yet allow for new themes to emerge.

Sample and recruitment

The targeted sample size for my interviews, and the number for which I was approved by the University of Minnesota IRB (see Appendix A) was set at ~20 Latino immigrant parents and ~10 community agency staff. This falls within the range of that recommended for qualitative work (Creswell, 2007) and includes recognition that I would determine my final sample size by assessing data saturation as I iteratively conducted data collection, transcription, and analysis. I ultimately interviewed 14 Latino immigrant parents (11 mothers, 3 fathers) and 6 key community informants (see below for more detail on saturation), still within the bounds of the recommended sample size (Creswell, 2007). Latino immigrant parents eligible to participate included parents born in a Latin American country with at least one child under 18. Key community informants were individuals in social service or community agencies and clinics who had worked with the Latino immigrant community for at least five years and identified themselves as sufficiently knowledgeable of the experiences of Latino immigrant parents navigating the health care and insurance system.

Parent recruitment

I employed stratified purposive (quota) chain referral (snowball) sampling (Teddlie & Yu, 2007) to recruit parents in order to 1) increase my chances of recruiting a sufficient sample, and 2) ensure my ability to interview parents not identified through formal networks. Chain referral sampling begins with participants recruited through formal networks (e.g., my community connections) and then asks participants to suggest additional contacts (Teddlie & Yu, 2007). The emergent aspect of a purposive chain

technique allowed me to recruit participants with particular experiences beyond what previous contacts had helped explain; for example, I wanted to interview parents of varying documentation statuses, as well as parents who have lived in the U.S. for a short or long period of time, parents with children of a range of ages and insurance status (e.g., Medicaid/CHIP, ESI, uninsured) and both insured and uninsured parents. My primary concern was recruiting parents and children who fell into the parent/child dyads (or strata) I examined in AIMS 1 and 2, so sampling reflected what is known as stratified or quota sampling where recruitment is based on recruiting a set number of individuals across certain characteristics (Teddlie & Yu, 2007).

Recruitment was facilitated by my strong foundation in the Latino immigrant community in MN, which I began to establish over a decade ago in the six years I worked at an agency serving Latino immigrants in the Twin Cities. Difficulties often inherent in recruiting samples for qualitative research were diminished through these strong community connections (MacDougall & Fudge, 2001) and these connections are strengths of my work. I was able to bring close partnerships formed prior to my graduate work that comprised formal/informal networks from which to recruit parents. Specifically, I worked with a community liaison who received a $200 stipend for her time/efforts. My community liaison was a member of the Twin Cities Latino immigrant community who had worked with Latino immigrant parents in social service and health care agencies for over a decade.

A recruitment script with study and eligibility criteria was created in Spanish and English (see appendix B) for use by my community liaison, who then facilitated the time

and place of interviews.[20] Prior to initiating, I also met with my community liaison on three occasions in order to review the purpose of the study, answer questions she had about the study, and confirm who my target population was in order for her to identify potential participants. Once data collection began, we were in weekly, sometimes daily, communication to coordinate parent availability with my schedule and/or to clarify certain aspects of the study. For most weeks, I would send her my availability and then she would proceed with scheduling interviews within those days/times.

Recruitment was limited to strictly oral communication because I had to address IRB concerns about the safety and risk burden of potential participants from the process of distributing printed recruitment flyers throughout the community. To lessen the burden on my community liaison, we had originally intended to give interested potential participants the option of contacting me directly (by phone). However in my communications with the IRB it was determined that it was preferable to minimize risk – as I would then potentially have had their phone number in my records – by not establishing this connection. In total, 23 parents were invited to participate. My use of chain referral sampling still used my community liaison as the contact person whereby the participant informed my community liaison of the potential participant as opposed to providing that information to me. A total of four parents were recruited through chain referral sampling.

My community liaison was a crucial link in establishing trust prior to interviews. Participants were able to have any questions or concerns about the interviews addressed

[20] As seen in the recruitment script, I initially had planned to give participants the option of calling me to set up the interview, but we decided that for confidentiality purposes, my liaison would set up the time and place of all the interviews.

prior to our meeting time, rather than having to wait until the actual interview to determine whether they felt inclined to participate. (Still, I followed informed consent protocols prior to each interview and repeatedly stressed the voluntary nature of the study – see Data Collection section below.) The strong connections and rapport of my community liaison were apparent in the lack of no-shows or cancelations throughout the entire period of data collection. There were two occasions where interviews needed to be rescheduled, but they were never canceled entirely. On one occasion, a parent remembered that she had a prior commitment and on another, I had to cancel due to a sick child. In both cases we were able to reschedule shortly thereafter.

Recruitment and trust-building were also strengthened by the community liaison's knowledge of the time I spent working in the Latino immigrant community, my connections to the community in my everyday personal and professional life, and my fluency in Spanish. This enabled her to describe to participants with whom they would be speaking and demonstrate that I had many years of experience working and interacting with Latino immigrant parents. She was able to demonstrate that this research was not simply a fleeting issue as a one-time dissertation project, but rather a topic area with which I have interacted for more than a decade and a half in various capacities. Given the long and often troubled history of research in underserved, marginalized communities, having a member of the community who can "vouch" for an academic researcher is essential. Yet, a researcher's connection to and investment in the community can take years to establish and is certainly never guaranteed.

Parent sample

As mentioned above, I provided my community liaison with a spreadsheet demonstrating the variation in parent characteristics that I intended to recruit. This was not meant as a hard and fast recruiting quota, but a picture of the different characteristics I wanted to capture. My intention had been to interview an equal number of parents across varied documentation statuses; however, I ended up with slightly over half of my participants lacking documentation status –primarily related to my community liaison's connections in the community. In hindsight, this scenario was helpful as in my quantitative analyses it was apparent that children in families where both parents are undocumented suffered the greatest barriers to coverage. Importantly, although my community liaison knew that I was recruiting across different documentation statuses, she did not share individual parent's status with me. Instead, I directly asked parents to share their migration history at the beginning of the interview.

I was able to meet quotas based on a few other qualifications. I interviewed parents of both young and older children (age range: 2-21); parents from different countries of origin; parents in the US for less than 10 and 10 or more years; parents with varying levels of English proficiency; parents working in various industries; children with ESI, medical assistance, and "discount" plans; insured and uninsured parents; and children born abroad and born in the U.S. One area in which I was not able to obtain a diverse sample was children's insurance. All citizen children in my final sample were insured; all noncitizen children with undocumented parents were uninsured. For reasons I describe below, I think this was driven mostly by the low uninsurance rate in MN coupled with high Medicaid/CHIP eligibility levels, as well as Medicaid/CHIP

expansions over the past decade. I had also intended to recruit parents in both urban and rural areas, but ultimately was only able to interview parents in the Twin Cities metropolitan area, as I was limited by my community liaison's own connections and parents' availability. (However, I was able to speak to community key informants with experience working with the community in rural MN).

Recruitment and sample of key community informants

Recruitment of key informants was straightforward, and I relied on my own contacts to identify potential participants (see Appendix C for recruitment script). Informants included staff in leadership and direct service roles at social service, health care, and/or state agencies who had worked directly with the immigrant community for at least five years and/or identified themselves as sufficiently knowledgeable of immigrant parents' experiences navigating coverage and health care for their children. I identified key informants through the formal and informal networks of former colleagues, friends, and family (I did not interview any family members; rather family members aided in identifying potential participants from their networks). I conducted most recruitment through email messages, but also communicated with key informants over the phone or by text messages. Key informants included in my final sample worked with Latino immigrant parents through government, safety net clinics, and employment agencies, and included MNsure navigators, community health workers, clinic staff, and employment recruiters.

Study Setting

The Midwest provides a rich sample, as many social service and health care agencies are focused on serving Latino immigrants and their children, as Casey et al. demonstrate in their case studies across three Midwestern states (Casey, Blewett, & Call, 2004). There are certainly demographic differences compared to other states, especially as related to the migration patterns and size of the Latino immigrant population (Pew Hispanic Center, 2012), and I was cognizant of these differences and reflected upon them in my analyses. My sample of parents may have been limited by the fact that MN has one of the lowest uninsurance rates in the nation; however, MN also experiences large disparities whereby Latino children are 3 times more likely to be uninsured than their non-Hispanic white counterparts (SHADAC, 2012). Contributing to the high insurance rate are high rates of ESI and higher than average levels of Medicaid eligibility. Minnesota also provides medical assistance to income-eligible pregnant women regardless of status through a CHIP federal match, which as I demonstrate in Chapter 5 (AIM 3 Results & Discussion) proved to be an important pathway to coverage for their citizen children.

Data collection procedures

Development and refinement of the semi-structured interview guide

Although I identified broad themes and core questions for the semi-structured interviews, significant relationships or unexpected findings from **AIMS 1** and **2** that required clarification were used to develop more specific questions to be asked of parents and key informants. For example, if I found that barriers included in my conceptual model proved significant in adjusted analyses, I was able to adjust the guide to explicitly

inquire about these barriers as opposed to focusing solely on legal status as a barrier. There were two major areas of revision that resulted from my **AIM 1 and 2** findings: 1) the primacy of employer-sponsored insurance in driving coverage disparities by parental documentation status, and 2) the salience of (lack of) English language proficiency as a significant barrier.

In addition, prior to beginning regular data collection, I conducted a pilot interview with a close friend who was a Latina immigrant mother of three U.S.-born children who had lived for several years without documentation status but had recently adjusted her status to legal permanent residence. Her unique experience allowed her to speak to the usefulness of the interview guide for both undocumented and documented parents. I conducted a full one-hour interview with her (in Spanish) and received her immediate feedback on questions that needed clarification and/or re-wording. I took notes during the interview to note where I picked up on points of confusion or areas in which I would need to rephrase my questions in order to gain more depth or solicit different information than my original question had been able to gather. Immediately following the interview I made minor changes to my interview guide as a result. In addition, the lead transcriber, whom I describe below, reviewed drafts of my interview guide and offered feedback on how to make the guide more conversational and align more closely with the information I was attempting to gather.

Semi-structured interviews

I conducted interviews that lasted between 25 to 90 minutes (average 45 minutes for both parent and key informant interviews) and were almost entirely in Spanish (2 parent interviews and 2 key informant interviews were conducted in English following the participants' preference). I am fluent in written and oral Spanish and so was able to conduct the interviews based on the participants' preference. Interviews were conducted between August 2014 and March 2015. Interviews with parents were held at locations convenient for participants, including a local safety net clinic (3), public gathering places (2), and participants' homes (9). I began conducting interviews in the safety net clinic as we viewed this space as a neutral, comfortable environment for parents. This did seem to be the case, but after the third interview I started to worry that because of the location of the interview parents may have been holding back on describing barriers they had faced in accessing care and during health care visits. Although my community liaison and I were sure to emphasize that this study was not affiliated with that particular clinic, it seemed that being there for the interviews may have given that impression. Consequently, we began to schedule interviews in other public places of parents' preference or in parents' homes; once given the choice, parents overwhelmingly preferred that I meet them at their homes. Interviews with key informants were either in-person (2) or by telephone (4), as most convenient for informants. Both parent and key community informant participants received $30 in compensation (Target gift card) for participation and to minimize costs incurred, such as childcare and transportation.

When interviews were conducted at a participant's home, for security reasons I did not record addresses in any documents/records, but simply called/received a phone

call from my community liaison shortly before the interview in order to get the address (without writing down/recording anywhere). I also followed a safety protocol where I notified my advisor (Call) that I would be conducting an interview at a certain date/time and then upon arriving at the participant's home I would text her to alert her that I had arrived. At that point she would set an alarm for two hours and if she did not hear from me by then would plan to alert authorities. I would then text her upon my departure. Because of the confidentiality of participants' addresses, I never shared these with my advisor. Rather, my advisor had my community liaison's phone number (who was also aware that I was at interviews and made herself available by telephone during that time) and could call her to determine my location.

The semi-structured interview is a particularly useful method of qualitative data collection, as it focuses on major themes and, importantly, encourages participants to expand, reflect on, and discuss in detail. My interview guide (see Appendix D in Spanish and English) elicited participants' experiences to enhance understanding of the role of parental documentation status for children's access to coverage and care. Six major themes were explored with parents and key informants within this broader objective: barriers to coverage/care, perceptions related to documentation status, treatment based on documentation status, interaction with private coverage, interaction with public health care programs, and how parents' own access to coverage and care influences how they access coverage and care for their children.

If parents were hesitant to discuss their own experiences, I had planned to probe about the experiences of parents in their networks; however, this was never the case. Key informants were also asked about state policies as barriers to or facilitators of care, how

policies are implemented "on the ground" (for example, how the six themes above play out in their day-to-day work), and their own perception of these policies. Semi-structured interview guides set up or initiate dialogue, but ultimately serve as an inductive approach where themes and meaning are shared directly from participants. Unlike structured interviews, a semi-structured guide allows participants to discuss their perspectives on themes not explicitly identified by the researcher. I used a guide to cover major themes, but used discretion during interviews to revise the order of questioning and ask additional unanticipated questions in response to participants' initial responses and their unique experiences (Patton, 2002). Immediately following each interview, I journaled about my initial thoughts and observations in order to aid in the analysis of transcripts and to serve as an important component of the iterative process of data collection and analysis. I also consulted with my lead transcriber at different points in time; during these phone calls he offered his advice as a qualitative expert, providing suggestions on how to deal with certain scenarios he had heard while listening to my interviews.

Migration history

In order to protect confidentiality and increase participants' security with the interview, I always asked about parents' migration history prior to starting the audio recording. This meant I did miss out on some recorded rich verbatim experiences related to migrating to the US and what that entails for families, but it was more important to ensure participants' comfort/security. Instead of starting the conversation directly asking about documentation status and to begin to inquire about a participant's story, I simply began the interview by asking parents if they could share their experience migrating to the U.S. At this point, many parents disclosed their status without solicitation; in cases

where this was not disclosed, I directly inquired whether they had status when they entered the country and whether they have since adjusted if not (to match the measures in my SIPP quantitative data source). Although I inquired directly about documentation status, participants were of course given the option to refuse a response (as with any questions in the interview), so questions in the interview guide could be revised to inquire directly or indirectly about experiences related to documentation status. All parents responded to these questions directly.

In the end, all participants voluntarily disclosed their status. Some parents shared their entire "border crossing" story with me, while other parents stuck to the major details regarding their country of origin and the year they entered the US. Many of these conversations moved into narratives of longing/nostalgia for family members (parents/grandparents) and "home" but also recognized that "home" was no longer a place to raise a family (due to economic/security issues). Parents also spoke of separations from partners/children when first arriving/coming at different points in time. I attempted to take detailed notes during this portion of the interview, in order to accurately record participant demographics but also so as to not lose these rich details.

Informed consent/protocol

To ensure confidentiality and facilitate participation of potentially interested parents, I requested a waiver of written consent from the UMN IRB for protection of participants without documentation of citizenship/immigrant status. In past projects on which I had worked with participants lacking documentation, the UMN IRB encouraged the researcher to request this waiver and recommended the researcher/staff obtain verbal consent and sign a form in front of the participant documenting that they have received verbal consent. As stipulated by the UMN IRB recruitment materials included: the PI's (my) name, university affiliation, and contact information; the purpose of my research; general eligibility criteria; and a direct, truthful description of potential benefits and compensation. Participants were informed during the consent process that I will report results but would not disclose any information about the participants' identity, or that would allow for identification of participants.

In addition to describing the study procedures and protocol, the informed consent process and the participation information forms (in English and Spanish, see Appendix E) explicitly emphasized that all responses were confidential. I, as well as the written forms, repeatedly stressed that participation was voluntary and that participants could refuse to answer any questions and choose to end the interview at any time. The form also included information related to the receipt of compensation for participation in the study ($30 gift card – the UMN IRB recommends gift cards or vouchers in place of check/cash compensation), provided to remunerate them for the costs associated with the time and inconvenience of participation (e.g., transportation, childcare). I was always gave participants the gift card prior to beginning the interview (but after they gave me their

consent of course), in order for parents to not feel pressured to extend the interview past the time frame within which they felt comfortable sharing.

Given the sensitive nature of the topics addressed (e.g., access to health insurance coverage, access to medical services, stigma of immigration or documentation status), it was possible that an immigrant parent or community informant could become uncomfortable or agitated answering questions during the interview. In anticipation that a participant could become agitated or upset during an interview, I had planned to implement the following strategies: If a participant were to become seriously upset or agitated during the data collection process, I was to terminate the protocol. If a participant were in crisis because of their situation, I was to provide the participant with information on appropriate resources from social services agencies with whom I have connections or an external agency. If the participant were to reveal information about abuse or neglect, I was to notify the proper authorities to protect the rights of clients (in compliance with Minnesota Law).

During two interviews, mothers began sharing experiences that were painful to revisit, and in both of these instances, I immediately turned off and put away the recorder (and let the mother know I was doing so) so that she would feel more comfortable and not "on the spot," and proceeded to listen to their recounting of these experiences for extended lengths of time. These audio interviews themselves were shorter than those of other parent interviews, but I spent more time with these women than I did with other parents as I did not want to leave until I felt the mother had had a chance to speak about these experiences. When I thanked them for sharing their stories, as I did with all parents and key informants, they thanked me for listening and described our conversation as

therapeutic. In one case, a mother revealed that they were approved for provisional status because an immediately family member had been the victim of abuse several years earlier. This case, as evident in the fact that the family had received provisional status as a direct result, had necessarily already been reported to and adjudicated by authorities. The latter case was related to a gravely serious health issue and the mother's experience in the health care system. Both women were currently connected to community agencies that were aware of these cases. I do not report on these experiences as I assured these mothers would be the case.

Saturation

As I describe below, data collection and analysis proceeded iteratively, and as a part of this process, I was to assess the data I was gathering – both during the interviews themselves and during analysis – for saturation. Determining sample size through the use of saturation, as opposed to adhering to predetermined sample size, allows the data to indicate the point at which no new information relevant to the study/question at hand is being gathered with subsequent interviews (Saumure & Given, 2008). Specifically, researchers must look out for a shift in the study when additional data are not contributing any new themes or sub-themes that would help better understand the phenomenon at hand. Interestingly, right around the same time that I was feeling like I was hearing the same information with each subsequent interview (right around my 12th parent interview), my lead transcriber – in listening to and documenting the audio – independently came to the same conclusion. I still proceeded with two planned interviews that had already been scheduled and committed because canceling would have been disrespectful, and thus ended the study with 14 total parents. In addition, information

from key community informants was beginning to converge with themes and sub-themes I was identifying in the parent interviews, although with some important contradictions.

Transcription and data security

Transcription. Interviews were audio recorded and transcribed verbatim (from Spanish to English in most cases) by HACER (Hispanic Advocacy & Community Empowerment Research), an agency with extensive experience conducting and transcribing Spanish-language qualitative data for community and University research projects. Audio files were encrypted and shared with HACER through a password-protected folder on the University of Minnesota's *Netfiles* service. Various staff transcribed the interviews, but the Director of HACER listened to each audio recording to check the accuracy of the translation and transcript before returning them to me. Then, upon receipt of the transcripts, I also listened to the original recordings to check the accuracy and fill in any areas where the recording was not audible. Finally, for every quote that I include in my findings, I again went back to the original audio recordings to verify both the Spanish verbatim text and the English translation.

Data protection and security. Regarding protection of participant data and data security, I worked with the UMN to put strict data security guidelines into place. First, I did not explicitly inquire about any information identifying participants, but rather assigned each participant a number that I recorded in the audio recording file name (but I kept no record linking names – in cases that participants gave me their names without solicitation – to participant ID numbers). Text transcripts were also assigned a number and a pseudonym rather than the participant's real name, so as to prevent specific transcripts from being linked to participants. I was able to work with the administrative

staff in the HPM Division in order to remove the requirement of documentation of participants' names and signatures for financial purposes (participants instead signed with an "X" to verify receipt of gift cards).

Project-specific analytic data (audio recordings and electronic text transcripts) are stored on a secure server located off site and managed by the U of MN. I am the only person authorized to access these data and am required to use a VPN connection and unique password protection. All connections and file transfers on this server were audited. When not working from my UMN workspace I accessed the server through a VPN connection from my laptop which was encrypted, and firewall/anti-virus protection will be maintained per University standards. No identifiable data were transmitted by unsecured telecommunications.

Prior to sharing audio recordings with HACER, I reviewed each recording to edit and delete any identifying information that may have been shared by the participant during the course of the interview (names, clinic names, worksite names (unsolicited)). Thus, the person transcribing data only had access to de-identified recordings including a participant's study ID number only. De-identified physical text transcripts are stored in a locked cabinet in a locked office that has restricted access (within the research center where I am currently employed and will continue to be employed during the project period) and access is audited. No files were physically moved from the UMN. Hard-copy transcripts will be stored until all analyses based on these data have been accepted for publication and/or for five years, whichever comes first.

Analysis

Analysis of transcribed data followed a quasi-inductive, descriptive/thematic approach (Saldana, 2012). A quasi-inductive approach, which begins with some preconceived notions but allows for discovery of new themes, was appropriate because I had major themes I was interested in exploring (as I outline above), but I also wanted to leave room for new themes/codes to emerge. I combined manual coding, involving systematic reading and rereading of transcriptions, with analysis in Atlas.ti (qualitative data analysis software). Atlas.ti is an intuitive software that follows closely the process of manual coding whereby the analyst is able to view the document as is and then add codes and memos "in the margins" as one does with manual coding. The analyst is also able to highlight important quotes that are representative of certain codes, which are then stored in a joint window for easy access later in the process. Another feature that greatly facilitated my analysis was the ability to create "families" of transcripts in order to compare the experiences/coded themes of certain participants against others. Here specifically I was able to create "families" by the parental documentation status and children's citizenship status and insurance status associated with each transcript, which facilitated comparison of the unique barriers and facilitators experienced by each distinct group.

As is common in qualitative research, data collection and analysis proceeded iteratively so as to mutually inform each other (Creswell, 2007). Meaning and themes identified during concurrent analysis helped inform subsequent interviews. I first began by documenting my own thoughts on and experience of the phenomenon. A fundamental premise of qualitative research is recognition that the researcher must "bracket" personal

experiences in order to understand a phenomenon through the participants' perspective (Riemen, 1986). My own experiences are not firsthand, yet working in the community has nonetheless informed my perspective, and I needed to situate myself within my research (see "researcher positionality" below).

Following documentation of my own preconceptions and reading of transcripts, I looked for and coded nonrepetitive, nonoverlapping phrases or statements (Field & Morse, 1985) that demonstrated the range of parents' experiences. I then identified the meaning of each code, looking for meanings that brought out the context of original descriptions. Meanings were then grouped into clusters or units (categories), in an attempt to establish commonalities across accounts. Original descriptions were referenced to validate clusters identified in the prior step. I identified whether there were any significant areas within the original description that were not captured in clusters, and vice versa, whether clusters reflected any ideas not present in the original text. When this was the case, I reassessed my "coding" up to this point. I then mapped these categories onto six broader themes. At this point I looked for any contradictions across or within themes and/or categories; such a scenario is acceptable and even expected in qualitative research where experiences have multiple meanings and do not always follow logical, explicable patterns and participants' accounts are viewed as "real and valid" (Riemen, 1986). In order to assess the reliability of my coding, categorization, and theme-mapping, a committee member (Garcia) coded a select interview for comparison of emerging codes/themes. I continued all of these iterative processes until I arrived at a comprehensive exhaustive description of experiences. Of note, findings presented here are reflective of my primary codebook (see Appendix F), or codes that are related to or

help explain the relationship between parental documentation status and access. Secondary codes, those which are outside of the scope of this primary question, were plentiful and are also organized within Atlas.ti and within a separate codebook.

Researcher positionality

Being aware of one's position as the researcher and one's own experience within the community and within the area of study is an essential component of qualitative research (Tashakkori & Teddlie, 2010). On the one hand, I am a white, middle-class woman born to non-immigrant parents; on the other, since 2000 I have spent a substantial portion of my personal and professional life with the Latino immigrant community. Furthermore, while I had worked for six years with the Latino immigrant community in a social service agency located within a neighborhood where many parent interviewees likely reside, I had now spent more time (almost eight years) at the University of Minnesota and in academia. While in my everyday personal life I live next to and attend mass, celebrate, and share playgrounds with many of the same parents who could have participated in the this study, the interviews themselves were conducted within the realm of academic research and all of the damning history, mistrust, and power issues this entails.

My fluency in written and oral Spanish was essential in order for me to conduct these interviews on my own. (That is not to say parents and I did not experience some moments of confusion where the way I had worded a question was "lost in translation"). Only two of the 14 parents preferred that the interview be conducted in English. However, my familiarity, comfort, and genuine companionship with the Latino immigrant community go beyond language. Many of my closest friends are Latino

immigrants; I also have many dear, close friends who currently are or were undocumented in the past, and their humility and openness in sharing their stories has no doubt shaped my worldview and planted context that could influence – for better or for worse – my interpretation of these specific parent interviews. In order to conduct these interviews, I was not venturing into neighborhoods unfamiliar to me or interacting with folks whom I would not cross paths in my everyday life. My husband of ten years is a Colombian immigrant who has been in the U.S. for twelve years. My mother-in-law a recent (3 years) immigrant lives with us and has taught me immeasurable cultural humility and offered a unique, intimate perspective of the immigrant experience. Granted, both of them migrated to the U.S. under more privileged circumstances than many of the interviewees and are from South America as opposed to Mexico and Central America. However, our community of friends and the parents and families I have worked and shared with over the years represent a racially, economically, and culturally diverse immigrant community. This was evident in the fact that I had previously interacted with, although briefly and informally, two of the 14 parent participants, a fact unknown to us before meeting for the interview.

All that being said, no matter how much time I have spent, how many stories I have had the honor of listening to, or how comfortable *I* feel, I will never fully understand what it is like to be an immigrant, what it is like to be "invisible" as an undocumented immigrant, or what the journey here entailed. In addition, because of the privilege that comes along with my skin color, language, and educational opportunities, there are inherent power dynamics that no doubt affected parent participants' comfort with me during interviews and simultaneously shape my interpretation of their narratives.

No matter how comfortable I perceive the parents to feel, the history and the power dynamics inherent in these interactions privilege the researcher and heighten the participant's vulnerability. The researcher is in a "safe" space, not having to disclose much, while the participant is sharing their story and disclosing sensitive information and experiences. These same dynamics come into play as the researcher analyzes the narratives and the compressed data. One must always attempt to see the "data" from parents' perspectives, but inherently the researcher will see them from a privileged standpoint.

At the time of the interviews, my "outsider" status was most apparent when standing outside of (or in the front entry of) apartment complexes prior to interviews, where residents (not the parent interviewees) certainly implied that it was obvious to them I did not belong there. They were never rude, just cautious, as one would expect. After the first few minutes of the interview, many parents would ask me where I was from – some admitting that from my accent they were convinced I was not Caucasian, and mostly wondering about where my accent was from. After eleven years with my husband and three years of living with my mother-in-law, I have certainly picked up their accent and many words that are unique to Colombian Spanish.

Finally, in my work at the social service agency, I interacted with hundreds of Latino immigrant parents in assisting with public program enrollment. I believe this made the current study more feasible because 1) I had had to learn how to subtly ask about documentation status (for application purposes only, where it asks for a social security number), but 2) had also learned that with trust and rapport parents often voluntarily disclose this information. However, I am also aware that it could present itself as a

disadvantage – or at least a bias to be aware of – because I was asking parents about that very process and so had to be extra vigilant to ensure that my direct experience on the other side of the desk did not shade my interpretation or willingness to truly hear their narrative.

Specifically, in my time in this position at the social service agency, I had perceived a preference for assistance at community agencies rather than county offices. Contrary to my expectations, I heard from parents that they often preferred county offices because of mistakes/delays in assistance and paperwork at community agencies, which was difficult for me to hear. Importantly, I did not disclose that I had worked in this position to parents, as this likely would have led them to lessen their negative experiences and perceptions of the process. There was a single participant who had in fact received services, in particular application assistance while I was in this position, but this was completely coincidental and did not appear to affect data collection, as she still went on to share negative experiences. In that case, I was careful to explain that I had not worked at this agency for the past eight years and was not affiliated with it, but rather with the University.

Validity checks

In addition to documenting and keeping in the forefront my position and potential biases as the researcher in interpreting and representing the voices of the parents and key informants, I sought the assistance of two individuals deeply involved in both this study and in the Latino immigrant community: my community liaison and the lead transcriber of my study transcripts. Both of them reviewed my findings and discussion in Chapter 5 to assess whether and how well they thought I represented faithfully and accurately the

experiences and narratives of study participants and Latino immigrant parents in the Twin Cities in general. They concurred that my representation of interviews themselves, the participants, and the Latino immigration community in the Twin Cities generally was authentic and rigorous. My community liaison, a Latina immigrant parent herself, has worked for over a decade in the Latino immigrant community with parents of varied documentation statuses and specifically in the realm of social services and health care. The lead transcriber is also a Latino immigrant parent who has been involved in research and programming in the Latino immigrant community for over two decades and is an expert in bilingual Spanish-English qualitative data collection, transcription, analysis, and dissemination.

Figure 2.1. Specific Aims & Analytic Model

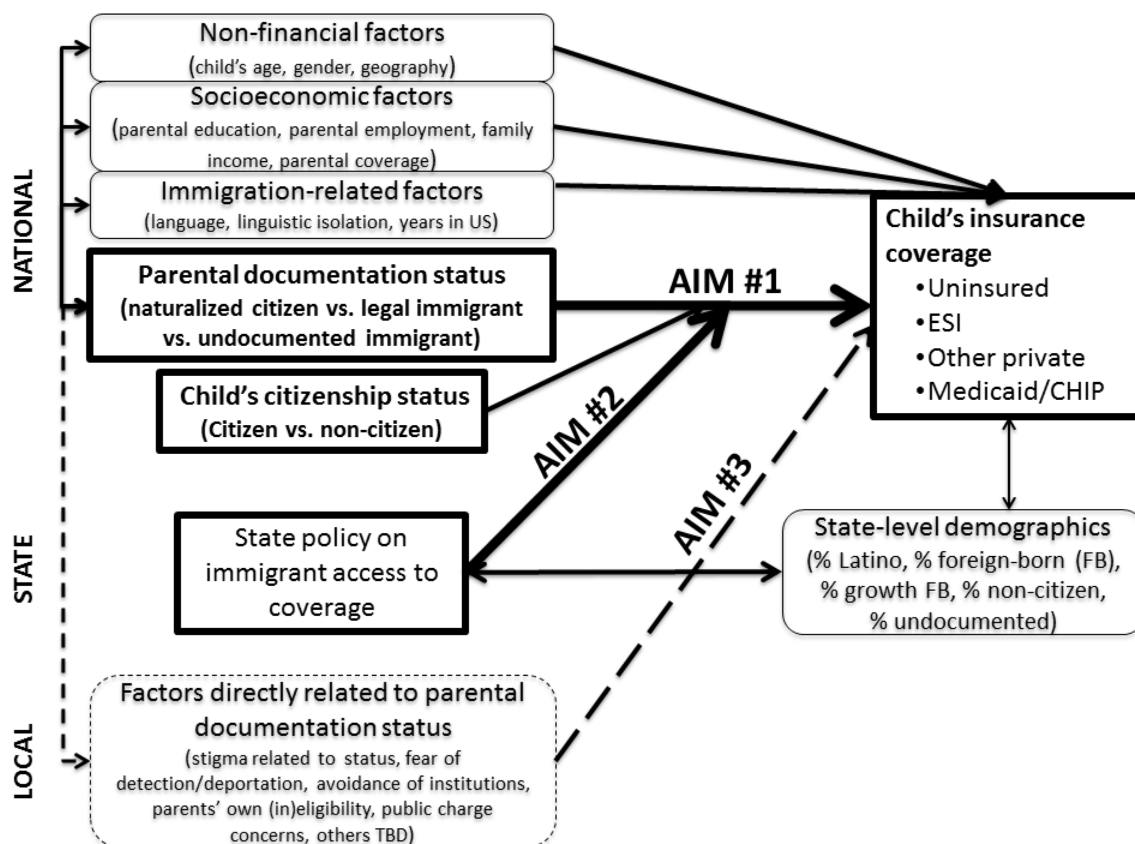


Figure 2.2. Procedures: Sequential Explanatory Design

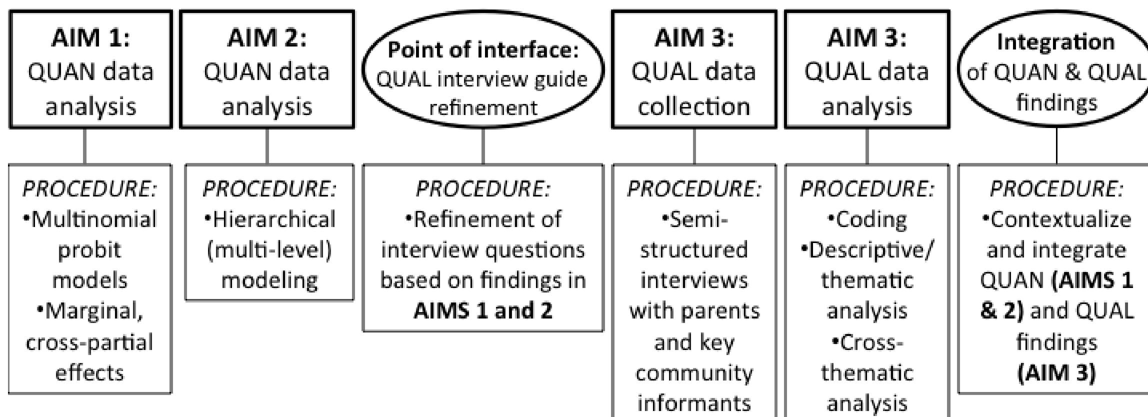
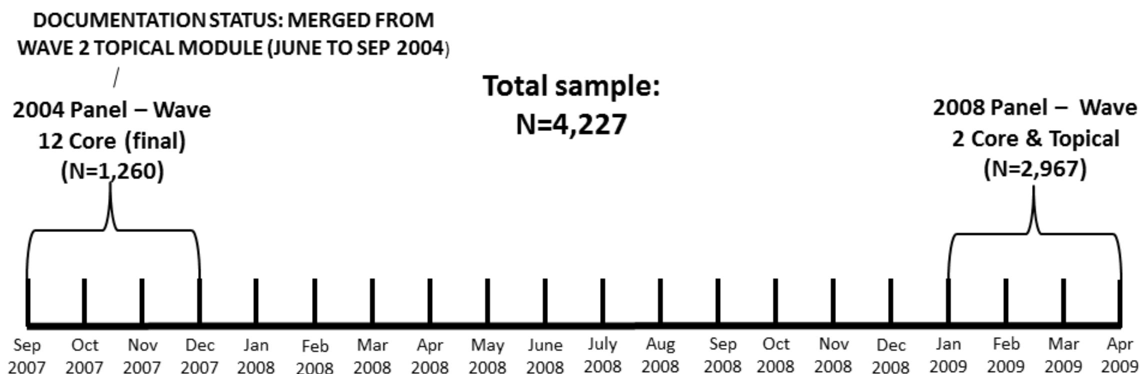


Figure 2.3. Pooled SIPP Sample: Children of Latino Immigrants



Note: Secondary data; no data collected for **AIMS 1 and 2.**

Figure 2.4. Latino Immigrant Parents

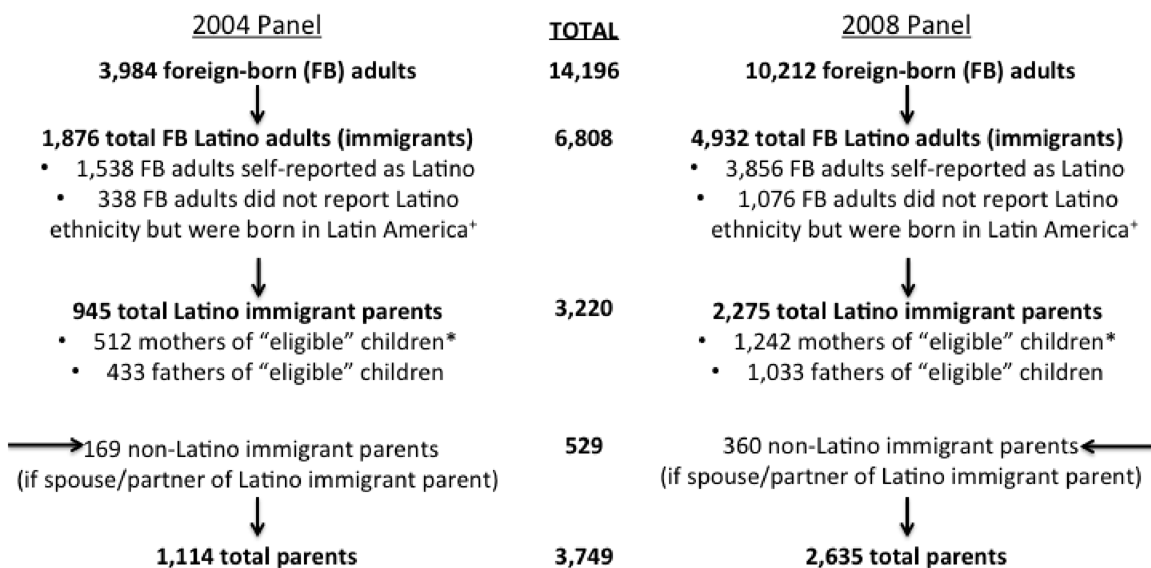


Figure 2.5. Assignment of Citizenship/Documentation Status

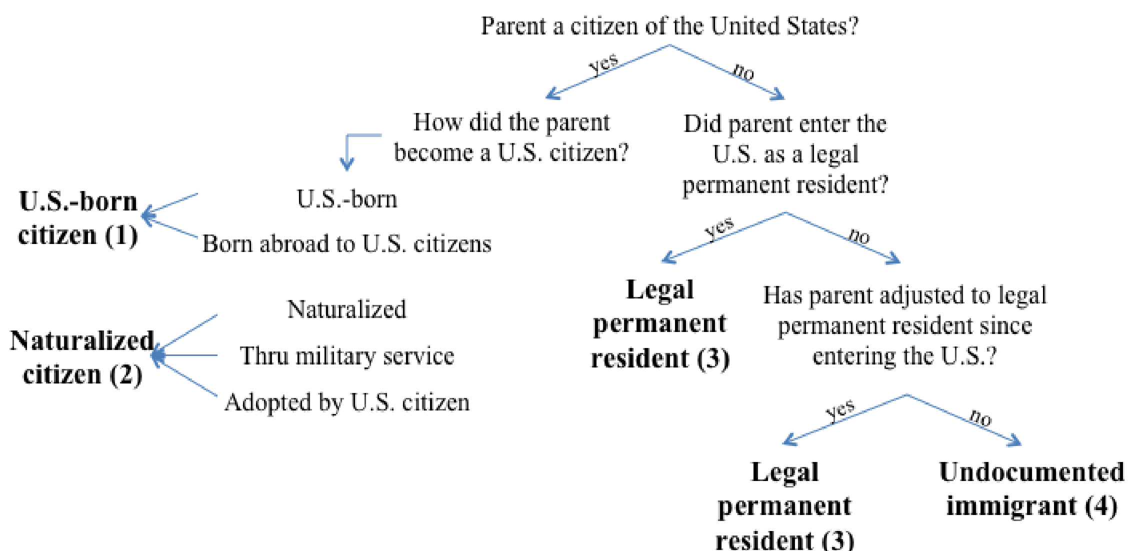


Table 2.1. Parental Documentation Status by Children's Citizenship Status

	Citizen child	Noncitizen child	Total
Citizen/LPR parents	92.7%	7.3%	100.0%
	74.5%	*50.7%*	*72.0%*
	2797	251	3048
At least one parent is undocumented	81.8%	18.2%	100.0%
	25.5%	*49.3%*	*28.0%*
	942	237	1179
Total	89.6%	10.4%	100.0%
	100.0%	*100.0%*	*100.0%*
	3739	488	4227

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, September 2007; 2008 Panel Wave 2, December 2008
Underlined percentages are weighted estimates of the breakdown of children's citizenship status by parental documentation status.
Percentages in italics are weighted estimates of the distribution of parental documentation status for citizen vs. noncitizen children.

Figure 2.6. Parental Documentation Status Among Citizen Children in 2-parent Families

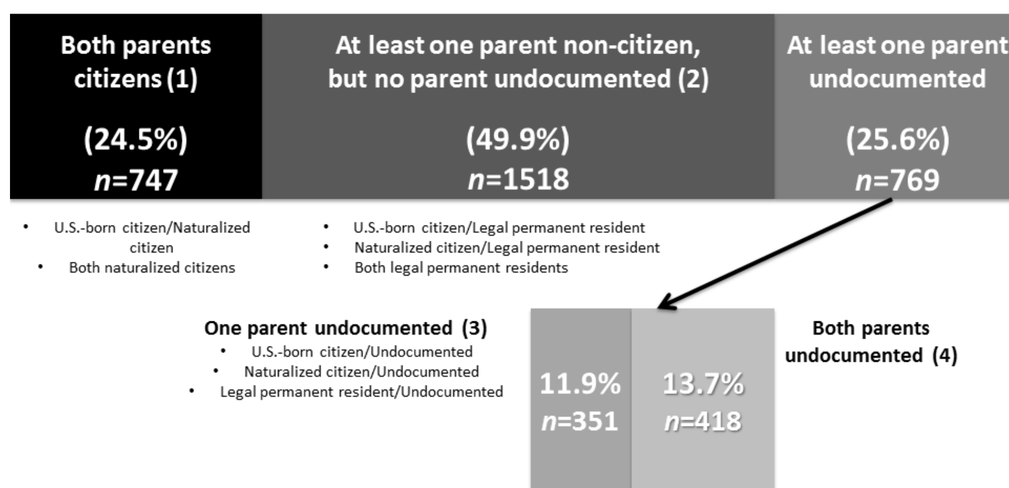


Table 2.2. Measures

Measure	Description
Individual-level measures (Source: SIPP)	
Dependent variables	
Child's insurance coverage	
Uninsured vs. insured	Child's (point-in-time) health insurance status
Type of coverage	Employer-sponsored insurance vs. other private vs. Medicaid/CHIP
Medicaid participation (among eligible)	Enrolled in Medicaid/CHIP (based on state-specific income/immigrant eligibility)
Independent variables	
Parental documentation status	Naturalized citizen vs. legal permanent resident vs. undocumented
Child's citizenship status	Citizen (U.S.-born and naturalized) vs. non-citizen
Non-financial barriers/facilitators	
Child's age	0-2, 3-5, 6-10, 11-17
Child's gender	Female, male
Geography	Metropolitan statistical area (MSA) vs. non-MSA
Immigration-related barriers/facilitators	
Parental English language proficiency	Highest language proficiency between parents: Not well or not at all, very well or well
Household linguistic isolation	Whether any individuals over 14 in a household speak English well or very well
Parents' length of time in country	No parent in US > 5 years, at least one parent in US >5 years
Socioeconomic barriers/facilitators	
Family income	Family income as % of federal poverty guidelines (FPG): >=100% FPG; 101-200% FPG, 201-300% FPG, 301-400% FPG, 401%+ FPG
Parental education	Highest level of education of parents: Less than HS, HS diploma, some college/college graduate
Parental insurance coverage	At least 1 parent w/ ESI, at least 1 parent insured but not thru ESI, no insured parent
Parental employment status/industry	No parent employed; parent(s) only employed part-time; at least 1 parent employed full-time, but only in low ESI offer industry; at least 1 parent employed but only in mid-ESI offer industry; at least 1 parent employed full-time in high-ESI offer industry
Parental firm size	Highest firm size between parents: no parent employed; <25 employees; 25-99; 100+
State-level measures	
Primary moderator variable (Source: Kaiser Commission on Medicaid & Uninsured)	
Immigrant access to public coverage	see index in Table 2.3
Covariates	
% Latino	% of state's population of Hispanic/Latino identity
% foreign-born	% of state's total population that are non U.S.-born
% growth foreign-born	% growth of state's foreign-born population since 2000
% non-citizen	% of state's total population that are non-citizen
% undocumented	% of state's foreign-born population that are undocumented

Table 2.3. State-level Immigrant Access to Public Coverage

State policy	No coverage for LPRs <5 years or undocumented	Cover LPRs <5 years, but not undocumented	Cover both LPRs <5 years and undocumented
Children			
# of states	34 states	12 states	4 states + DC
States	AL, AK, AZ, AR, CO, FL, GA, ID, IN, IA, KS, KY, LA, MI, MS, MO, MT, NV, NH, NM, NC, ND, OH, OK, OR, RI, SC, SD, TN, UT, VT, WV, WI, WY	CA, CT, DE, HI, ME, MD, MN, NE, NJ, PA, TX, VA	DC, IL, MA, NY, WA
Pregnant women			
# of states	27 states	8 states	16 states + DC
States	AL, AK, AZ, FL, GA, ID, IN, IA, KS, KY, MS, MO, MT, NV, NH, NM, NC, ND, OH, SC, SD, UT, VT, VA, WV, WY	CO, CT, DE, HI ME, MD, PA, TN	AR, CA, DC, IL, LA, MA, MI, MN, NE, NJ, NY, OK, OR, RI, TX, WA, WI

Source: Kaiser Commission on Medicaid and the Uninsured, July 2009 (for the years 2007-2008)

Table 2.4. State Index on Immigrant Access to Public Coverage

Restrictive (arrow)

Populations covered	
All four groups (4 states + DC): *All immigrant pregnant women and all or most children*	DC, **IL, MA, NY, WA**
Three of four groups (5 states): *All immigrant pregnant women; legal resident children under 5-year bar*	**CA, MN, NE, NJ, TX**
Two of four groups (16 states): *All immigrant pregnant women* OR *Legal resident pregnant women/children under 5-year bar*	**AR, CO, CT,** DE, HI, LA, ME, **MD, MI, OK, OR, PA, RI,** TN, **VA, WI**
None (25 states)	AL, AK, **AZ, FL, GA,** ID, **IN**, IA, **KS,** KY, MS, MO, MT, **NV,** NH, **NM, NC**, ND, OH, **SC**, SD, **UT**, VT, WV, WY

States with sufficient sample for mixed-level model are bolded

Table 2.5. AIM 1 and 2 Analyses

Model	Children	Parental documentation status	Health insurance coverage	Model	Universe statement	*N*	Tables	Notes
AIM 1: To estimate the marginal effect of children's citizenship and parental documentation status on coverage among the children of Latino immigrants	Citizen/ non-citizen children	Binary variable indicating whether at least one parent undocumented	Insured vs. uninsured	Binary probit	All citizen and non-citizen children	4227	3.3-3.6	Limited to binary indicator in order to observe parent/child status interaction
			Type of coverage	Multinomial probit	Citizen and non-citizen children in working families	3824	3.7-3.10	
Ancillary model: To estimate the marginal effect of parental documentation status on coverage among the children of Latino immigrants in 2-parent families	Citizen children only	Four categories: both parents citizens, at least one parent non-citizen but no parent undocumented, one parent undocumented, both parents undocumented	Insured vs. uninsured	Binary probit	Citizen children in 2-parent families	3034	3.13	Limited to citizen children in 2-parent families in order to observe four categories of parental documentation status
			Type of coverage	Multinomial probit	Citizen children in working 2-parent families	2893	3.14	
AIM 2: To examine state policy on immigrant access to public coverage as a moderator in the relationship between parental documentation status and children's coverage	Citizen children only	Binary variable indicating whether at least one parent undocumented	Insured vs. uninsured	Multilevel probit, binary probit	Citizen children in 30 states	3615	Tables 4.1-4.4; Figures 4.1-4.4	Limited to 30 states with sufficient sample per recommendations on multi-level modeling in the literature, and no cells with zero obs for parental documentation status by insurance status
		Sensitivity analyses for parental documentation status: imputed vs. non-imputed families (Appendix H); mother's documention status and father's documentation status (available upon request)	**Sensitivity analyses for health insurance:** all-year coverage; 4th reference; any across 4 months in wave (available upon request)		**Sensitivity analyses for sample:** svy: probit models with full sample (e.g., not restricted to 30 states) (Appendix J)			

CHAPTER 3. PARENTAL DOCUMENTATION STATUS AND COVERAGE DISPARITIES AMONG THE CHILDREN OF LATINO IMMIGRANTS

Chapter summary

The primary objective of AIM 1 was to examine differences in uninsurance and type of coverage by children's citizenship status and parental documentation status. An ancillary aim was to examine coverage among citizen children alone, which – as I describe in Chapter 2 (Methods) – allowed for a more fine-grained approach to understanding parental documentation status. The first half of this chapter presents results from the former, the second half from the latter (see Table 2.4). The discussion weaves through both.

I found that the children of Latino immigrants experienced high uninsurance rates and low rates of ESI. Non-citizen children fared the worst, with uninsurance rates of 54.1% compared to 28.2% for citizen children ($p<.001$). Citizen children with at least one undocumented parent had lower rates of insurance than their counterparts (32% vs. 27% for citizen children with citizen/legal permanent resident (LPR) parents, $p<.001$). These differences were no longer significant after adjusting for age and immigration-related and socioeconomic barriers and facilitators. In adjusted multinomial models, citizen children with undocumented parents were significantly less likely to hold ESI coverage than citizen children with two citizen parents.

The children of Latino immigrants: Insurance coverage and demographics

Overall, 30.8% of citizen and non-citizen children lacked insurance coverage (see Table 3.1). The most common form of coverage was Medicaid/CHIP (38.8%);[21] the remaining held employer-sponsored insurance (ESI) (26.7%) or private coverage (3.6%). Over half (54.2%) of non-citizen children were uninsured, compared to 28.2% of citizen children ($p<.001$). These differences resulted from lower rates of both ESI (13.5% vs. 28.2%) and Medicaid (27.4% vs. 40.2%). Among citizen children, there were also significant differences in the distribution of coverage by parental documentation status. Citizen children with at least one undocumented parent were more likely to be uninsured, more likely to be enrolled in Medicaid/CHIP, and less likely to hold ESI than their counterparts with only citizen and/or legal permanent resident (LPR) parents ($p<.001$).

To further examine the difference in Medicaid coverage by parental documentation status, I estimated the Medicaid participation rate among income-eligible children only, and then again among income-eligible children without private coverage. By examining the participation rate, I take into account the fact that children with at least one documented parent were more likely to be in poverty and thus more likely to be eligible for Medicaid (see below and Table 3.1). This may explain much of the differences in overall rates of Medicaid. The second estimate then also excludes children with private coverage from the denominator, in order to look directly at take-up only among those who do not have another type of coverage (Dubay, Kenney, & Haley, 2002). The difference in the rate of Medicaid between citizen children with citizen/LPR parents

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[21] Of children with Medicaid/CHIP alone, 60.4% had Medicaid coverage, 38.9% CHIP, and 0.7% some other type of public coverage.

and those with at least one undocumented parent was no longer significant after adjusting the denominator to examine the participation rate among income-eligible children alone.

Citizen children were overwhelmingly younger than their non-citizen counterparts ($p<.001$). Furthermore, citizen children with at least one undocumented parent were even more likely to be of a younger age than citizen children with citizen/LPR parents (52.6% vs. 33.0% 0-5 years of age, $p<.001$). There were significant differences in the gender distribution of children by citizenship status, where a greater proportion of citizen children were female ($p<.05$).

Children's citizenship and parental documentation status were also significantly associated with a number of immigration-related characteristics. First, while 89.2% of children overall had at least one parent who had been in the U.S. for more than five years, this was only the case for 74.1% of non-citizen children (compared to 91.0% of citizen children, $p<.001$). Citizen children with at least one undocumented parent were less likely to have at least one parent who had been in the U.S. for more than five years ($p<.01$). Non-citizen children were also less likely than citizen children to have at least one parent who spoke English well or very well, and more likely to live in a linguistically isolated household where no one over 14 spoke English well or very well (31.2% vs. 59.1% and 27.6% vs. 16.3%, respectively, $p<.001$). Furthermore, the proportion of citizen children with at least one undocumented parent in linguistically isolated households was actually closer to the overall rate for non-citizen children than it was to the rate of citizen children with citizen/LPR parents.

More than a quarter (26.1%) of both citizen and non-citizen children came from families where neither parent has a high school diploma/GED. This distribution varied

significantly by children's citizenship status (p<.01), and by parental documentation status among citizen children (p<.01). One third (33.7%) of non-citizen children had no parent with a high school diploma/GED, compared to 25.2% of citizen children. The proportion also varied between citizen children with at least one undocumented parent vs. those with citizen/LPR parents (30.6% vs. 23.3%). Over nine in ten children (91.5%) had at least one parent currently working. The distribution of parental employment did not vary significantly by children's citizenship or parental documentation status. Citizen children with at least one undocumented parent and non-citizen children overall were more likely to have parents only working in low ESI-offer industries, while almost two thirds (66.7%) of citizen children with citizen/LPR parents had parents in mid- or high-ESI offer industries. Nearly half (47.2%) of all children had parents employed in firms with 100 or more employees, but this also varied significantly by children's citizenship and parental documentation status. This proportion dropped to 37.1% for non-citizen children overall (p<.05), 27.5% for non-citizen children with at least one undocumented parent (compared to 46.4% of non-citizen children with citizen/LPR parents, p<.01) and 33.3% of citizen children with at least one undocumented parent (compared to 53.5% of citizen children with citizen/LPR parents, p<.001). The majority (70.6%) of children had family (HIU) incomes at or below 200% of federal poverty guidelines (FPG). Only 15.5% had family incomes of more than 300% FPG, and the remaining fall between 201 and 300%. There was also substantial variation by children's citizenship and by parental documentation status among citizen children (p<.001), where citizen children with at least one undocumented parent and non-citizen children overall were more likely to be at or below 100% FPG.

I also examined the distribution of parental coverage across parental documentation status, though I am not able to include this variable in my multivariate models as it is perfectly predictive of children's ESI coverage.[22] Overall, 42.7% of children had at least one parent with ESI and 39.4% had no insured parents. Over half (53.3%) of non-citizen children had no insured parent, compared to just over one third (37.8%) of citizen children (p<.001). Citizen children with citizen/LPR parents were the most likely to have at least one parent with ESI, while non-citizen children with at least one undocumented parent were the most likely to have no insured parent (60.7%). Among citizen children, parental documentation status was a significant predictor of parental insurance coverage (p<.001).

<u>Uninsurance and coverage rates among the children of Latino immigrants</u>

In Table 3.2, I present uninsurance and coverage rates by all covariates using row totals that estimate the distribution of coverage across each row. Uninsurance and coverage rates varied significantly on nearly every characteristic besides gender and metro/non-metro (see Table 3.2). The groups more likely to be uninsured included children between 10 and 17 years of age, those with no parent in the U.S. for more than five years, children whose parent(s) spoke English not well or not at all, those in linguistically isolated households, and children whose parents did not have a high school diploma. In addition, children whose parents were not employed, were only employed part-time, in low-ESI offer industries, in temporary work, or in firms with less than 25 employees were more likely to be uninsured. Children with family incomes at or less than

[22] Although I would be able to include this in models of children's probability of being insured, because I cannot include it in my multinomial models for consistency and comparison across models I do not include it in my binary probit models, either.

200% FPG were also more likely to be uninsured. Parental insurance coverage was had the strongest association with children's uninsurance, where half (49.9%) of children with no insured parent were themselves uninsured.

Employer sponsored insurance (ESI) followed a pattern converse to that of uninsurance , where the same levels of covariates within which low uninsurance rates were observed revealed the highest rates of ESI. Medicaid, however, followed its own pattern. Rates of Medicaid/CHIP were higher among 0-2 year olds, those whose parents had been in the U.S. for less than five years, with parents who did not speak English at all or spoke it not well, children in linguistically isolated households, children whose parent(s) did not have a high school diploma, children with no employed parent, with family incomes at or less than 100% FPG, and with at least one parent insured but not through ESI.

Binary probit models

Probit models were used to estimate the probability of being insured by children's citizenship status (Table 3.3), parental documentation status (Table 3.4), and an interaction of the two (Tables 3.5 and 3.6). I then transformed the coefficients on status and all covariates into predicted probabilities, or marginal effects – which estimates the difference in predicted probability against a reference group. I ran three sequential (nested) models, first estimating unadjusted marginal effects of status (1), and then adding in child's age and immigration related barriers/facilitators (2), and socioeconomic barriers/facilitators (3). The reference group for each covariate is the group most likely to be insured. For the interaction, only the effect of children's citizenship status and parental

documentation status are shown in Tables 3.5 and 3.6. Appendix G: Table A3.5 displays marginal effects for all covariates.

Children's citizenship

Children's citizenship status was a strong and significant predictor of being insured (p<.001) (see Table 3.3). Children's citizenship status remained significant across all models. In the unadjusted model (1), non-citizen children had a 26.0 percentage point (pp) lower probability of being covered than citizen children (p<.001). This difference dropped to 16.8pp in the final model (3), but remained significant at the 99.9% level.

Children's age, parental employment, firm size, and family income were also predictive of being insured in the final model (3). Children 10 to 17 years of age had a 11.6pp lower probability of being covered than children under 3 (p<.001), followed by a 7.2pp lower probability for children 6-10 years of age (p<.01). Children with no employed parents had a lower probability of being insured compared to those whose parents worked full time (8.9pp, p<.05). Compared to children with parents working in firms with 100 or more employees, children with parents working in firms of less than 25 employees had a 9.6pp lower probability of being insured (p<.01). Finally, family income as a percent of the FPG was associated with a 16.4pp, 16.9pp, and 12.2pp lower probability of being insured for children with family incomes at or less than 100% FPG (p<.001), 101-200%FPG (p<.01), and 201-300%FPG (p<.01), respectively, compared to those with family incomes over 300%FPG.

Parental documentation status

Models estimating the probability of being insured based on parental documentation status followed a mostly similar pattern as those examining children's

citizenship status (see Table 3.4). Once again, documentation status remained significant throughout all models, ranging from an unadjusted 8.8pp lower probability of being covered ($p<.01$) for children with at least one undocumented parent compared to those with citizen/LPR parents to an adjusted 5.3pp lower probability in the final model (3) ($p<.05$). Age, parental employment and firm size, and family income as percent of FPG were again significantly associated with coverage.

Interaction

Finally, I estimated models including an interaction between children's citizenship and parental documentation status in order to assess how parental documentation status alters the effect of children's citizenship on the probability of being insured. Table 3.5 presents the marginal effects for the status interaction alone.[23] First of all, citizen children with at least one undocumented parent had a 5.6pp lower probability ($p<.05$) of being insured compared to citizen children with citizen/LPR parents in model (2). However, once adjusting for socioeconomic characteristics in model 3, these differences were no longer significant.

Across all models both groups of non-citizen children, regardless of parental documentation status, were more likely to be uninsured than citizen children with either citizen/LPR parents or at least one parent who is undocumented. I also examined the effect of parental documentation status among non-citizen children alone and found that non-citizen children with at least one undocumented parent were less likely to be insured than their non-citizen counterparts with citizen/LPR parents, an effect that remained across all models (see pairwise comparisons in Table 3.6).

[23] The full model marginal effects can be found in Appendix G: Table A.3.5; the direction and significance of findings aligned with those from the model estimating the effect of parental documentation status alone.

Finally, to examine the full interaction – again, how parental documentation status alters the effect of the children's citizenship status on the probability of being insured – I estimate the difference for all children with citizen/LPR parents compared to the difference associated with children's citizenship status for all children with at least one undocumented parent. First, as shown in Table 3.5, in the unadjusted model (1) non-citizen children with citizen/LPR parents had a 19.2pp lower probability of being insured than citizen children with citizen/LPR parents (p<.001). I then estimated the difference by children's citizenship status between non-citizen children with at least one undocumented parent and citizen children with at least one undocumented parent, estimating that non-citizen children had a 30.6pp lower probability of being insured (p<.001) (see Table 3.6). I then took the difference-in-difference between 19.2pp and 30.6pp – or 11.4pp – which indicates how the effect of children's citizenship status is modified by parental documentation status. This difference would signify that the marginal effect of children's citizenship status is higher for children with at least one undocumented parent than for children with citizen/LPR parents. However, this difference was not significant in unadjusted or adjusted models.

Multinomial probit models

I also investigated type of coverage to better understand predictors of the distribution of children's insurance coverage. I ran multinomial probit models among children in working families,[24] which predicted the probability of being covered by ESI, Medicaid/CHIP, and other private coverage, *compared to being uninsured*. However, I

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[24] As I described in Chapter 2 (Methods), I limit my multinomial probit models to children in working families because I am predicting type of coverage, and only children in working families have the possibility of holding ESI coverage (one of the four types).

transformed the *multinomial coefficients* into *marginal effects*, which predicts the probability of being covered by each type of coverage *compared to all other alternatives*.[25]

Children's citizenship

Across all models, citizen children were significantly more likely to have either ESI or Medicaid/CHIP coverage than to be uninsured (see Tables 3.7 & 3.9). Specifically, in unadjusted models, non-citizen children had a 16.0pp and 11.6pp lower probability of being covered by ESI (p<.001) and Medicaid/CHIP (p<.001), respectively. In the second model including child's age and immigration-related characteristics, differences in ESI and Medicaid/CHIP were still significant between citizen and non-citizen children (p<.01). In the final model adjusting for age, immigration-related and SES factors, children's citizenship was only predictive of Medicaid/CHIP (14.5pp, p<.001), not ESI.

As seen in Appendix G: Tables A3.7 and A3.9, in adjusted models children's age was a significant predictor of holding Medicaid vs. all other alternatives. Parental English proficiency and linguistic isolation were associated with holding ESI, while only parental English proficiency was associated with Medicaid/CHIP. Parental industry and firm size were significantly predictive of both ESI and Medicaid/CHIP, as was family income.

Parental documentation status

The marginal effect of parental documentation status on the probability of holding ESI (against all other alternatives) was significant across all models; its effect on the

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[25] Because such a small percentage of my overall sample held private coverage, and because it was not of substantive interest in my dissertation, I do not transform the coefficients for private coverage into marginal effects. Therefore, private coverage is not included in Tables 3.7-3.10.

probability of being covered by Medicaid/CHIP was significant in all but the final models. Children with at least one undocumented parent were less likely to hold ESI, even when controlling for age, immigration-related, and SES factors (23.1pp lower probability in model 1 (p<.001) and 7.1pp lower in model 3 (p<.01)). Conversely, these children were more likely to have Medicaid/CHIP coverage (14.8pp higher probability in model 1 (p<.001) and 8.4pp higher in model 2 (p<.01)), but this difference was erased after adjusting for SES. The magnitude, direction, and significance of other predictors on type of coverage were similar to those in models predicting children's citizenship status (see above and Appendix G: Tables A3.7 and A3.9).

Interaction

Once again, I estimated the interaction between children's citizenship and parental documentation status, predicting the marginal effects of the probability of being insured by ESI, or Medicaid/CHIP (vs. all other alternatives). The pairwise comparisons are displayed in Tables 3.9 and 3.10. The probability of holding ESI was significantly lower for all groups compared to citizen children with citizen/LPR parents. However, the difference for non-citizen children with citizen/LPR parents is less than that of children with at least one undocumented parent, whether citizens or non-citizens. In the final adjusted model (3), the only pairwise difference that is significant is the difference between citizen children with citizen/LPR parents and citizen children with at least one undocumented parent, where citizen children with at least one undocumented parent have a 7.3pp lower probability of holding ESI (p<.01). The main interaction of interest, or how parental documentation status alters the effect of children's citizenship status on having ESI, was only significant in unadjusted models (see Table 3.10).

As for Medicaid/CHIP coverage, there were several statistically significant pairwise comparisons. In the final adjusted model (3), there were significant differences for each group compared to citizen children with citizen/LPR parents; however, the direction of these differences varied. Compared to citizen children with citizen/LPR parents, citizen children with at least one undocumented parent had a 6.2pp higher probability of being covered by Medicaid/CHIP (vs. all other alternatives) ($p<.05$). Both groups of non-citizen children had a lower probability of having Medicaid/CHIP, although the difference was greater for non-citizen children with at least one undocumented parent. The main interaction (difference-in-difference) was significant across all models, ranging from a 25.0pp ($p<.05$) to a 13.0pp ($p<.05$) higher probability associated with children's citizenship status for children with at least one undocumented parent compared to children with citizen/LPR parents.

Citizen children of Latino immigrants in 2-parent families: Insurance coverage and demographics

To examine a more complete picture of parental documentation status (a four category indicator that reflects both parents' status vs. the binary indicator I use above) I conducted ancillary analyses among citizen children of Latino immigrants in 2-parent families. As seen in Table 3.11, 24.5% of children in the weighted sample of citizen children of Latino immigrants in two-parent families had two citizen parents. Just under half (49.9%) had at least one non-citizen but no undocumented parent. Another 25.6% of children had at least one undocumented parent; among these children, 11.9% had one undocumented parent and 13.7% had two undocumented parents. Over a quarter (28.2%) of children overall were without any type of insurance coverage. The rate of uninsurance

varied significantly ($p<.001$) by parental documentation status, ranging from 22.0% of children in families where both parents are citizens to 35.6% of children with two undocumented parents. Uninsurance among children with at least one non-citizen but no undocumented parent, and children with one undocumented parent fell at approximately 29%. Examining the source of coverage shows still greater disparities: only 9.7% of children with two undocumented parents had ESI, compared to 53.3% of children with two citizen parents. Furthermore, only 28.8% of children with at least one non-citizen, but no undocumented parent had ESI and 20.7% of children with one undocumented parent. Public coverage did not completely make up for the gaps in ESI coverage, as evidenced in the significant differences in uninsurance.[26] A small proportion of children across my sample (3.1% overall) had other private coverage (direct purchase/other).

To examine differences in Medicaid/CHIP coverage across these groups, I needed to again take into account that children in families where both parents are undocumented had much lower family incomes. I estimated Medicaid/CHIP *participation* rates under two common universes (Dubay, Kenney, & Haley, 2002), first looking at report of Medicaid/CHIP coverage among only those children in my sample who were income-eligible in their state (n=1287) (under 2007 and 2008 state-specific Medicaid/CHIP income eligibility rules (Kaiser Commission on Medicaid and the Uninsured, 2009)), and then among those who were income-eligible *and* had no private coverage (*n*=1055). There were no significant differences in Medicaid/CHIP participation rates by parental documentation status under either universe (see Table 3.11).

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[26] Among children with public coverage, 59.5% reported Medicaid, 40.2% reported coverage through CHIP, and less than 1% reported some other public program.

As seen in Table 3.11, parental documentation status was associated with several differences across non-financial, immigration-related, and socioeconomic characteristics. Children with one or two undocumented parents were much younger than their counterparts ($p<.001$). Children with two undocumented parents were the least likely to have at least one parent in the U.S. for more than five years ($p<.001$). Parental English proficiency and household linguistic isolation also varied across groups. Children with two undocumented parents had the lowest levels of parental English proficiency (35.2% vs. 77.8% of children with two citizens parents) and the highest levels of linguistic isolation ($p<.001$).

Levels of parental education were highest for children with two citizen parents ($p<.001$) and the lowest for children with two undocumented parents. There were no significant differences in parental employment by parental documentation status. Children with two undocumented parents were the most likely to have parents employed only in low ESI offer industries, while children with two citizen parents were the most likely to have at least one parent employed in an industry with high ESI offer rates ($p<.001$). Children with two citizen parents were the most likely to have at least one parent employed in a firm with 100 or more employees (66.2% vs. 27.3% of children with two undocumented parents), while those with two undocumented parents were the most likely to have parents employed only in firms of less than 25 employees ($p<.001$). Family income as % of FPG also varied substantially across parental documentation status. Fifty-two percent of children with two undocumented parents had family incomes at or below 100% of FPG and only 11.2% had incomes above 200% of FPG, compared to

20.1% of children with two citizen parents at or below 100% of FPG and 59.1% above 200% of FPG (p<.001).

Finally, I examined the distribution of parental coverage across parental documentation status. Overall, 48.9% of children had at least one parent with ESI and 36.9% had no insured parents. Sixty nine percent of children with two citizen parents had at least one parent with ESI and only 20.5% had uninsured parents. In contrast, 62.3% of children with two undocumented parents had parents with no coverage and only 22.5% had at least one parent with ESI (p<.001). Under half of children with either at least one non-citizen but no undocumented parent or one undocumented parent had at least one parent with ESI, and a little over a third had no insured parents.

Table 3.12 displays the distribution of insurance coverage and type by the same factors as in the previous section.

Binary probit models

Next, I modeled the probability of being insured and calculated unadjusted and adjusted differences in insurance across three models (see Table 3.13 and Appendix G: Table A3.13). Children with two citizen parents had the highest probability of being insured, and children with two undocumented parents the lowest. In my unadjusted model, I estimated that, compared to children with two citizen parents, children with two undocumented parents had a 13.6pp lower probability of being covered (p<.05). Adjusting for immigration-related characteristics in addition to child's age (model 2) increased the gap for children with two undocumented parents to 14.7pp (p<.05. In the final model (3) adjusting for socioeconomic characteristics the difference between

children with two citizen parents and two undocumented parents was eliminated was no longer significant.

Multinomial probit models

Subsequent models predicted the probability of being insured by each type of coverage, compared to being uninsured, among children in working families only. However, as in my primary aim, the *marginal effects* estimated from the multinomial model represented the probability of being covered by each type of coverage *vs. all other alternatives*. I again estimated unadjusted and adjusted differences across three models (see Table 3.14 and Appendix G: Table A3.14). These models followed a similar pattern, where children with two citizen parents had the highest probability of holding ESI and children with two undocumented parents the lowest. However, adjusted differences were of much greater magnitude and significance, and children with at least one non-citizen but no undocumented parent as well as children with one undocumented parent also experienced significant gaps in ESI compared to children with two citizen parents. In my unadjusted model, I estimated a gap in ESI of 23.9pp between children with only citizen parents and children with at least one non-citizen but no undocumented parent ($p<.001$), 32.4 pp between those with citizen parents only and those with one undocumented parent ($p<.001$), and 44.0pp between children with citizen parents only and those with two undocumented parents ($p<.001$).

In model 2, significant, large gaps in ESI by parental documentation status remained, but were reduced to 15.9pp ($p<.001$) for children with at least one non-citizen but no undocumented parent, 23.4pp ($<.001$) for children with one undocumented parent, and 32.2pp for children with two undocumented parents ($p<.001$). Once I added in SES

(model 3), adjusted differences were again reduced and only remained significant for children with one or two undocumented parents, compared to children with two citizen parents ($p<.05$). Children with one undocumented parent had a 10.5pp lower probability of holding ESI vs. all other alternatives ($p <.05$), and children with two undocumented parents a 10.6pp lower probability ($p<.05$).

Finally, there were significant differences in the probability of being covered by Medicaid/CHIP – where in models 1 and 2 all other groups of children were more likely to hold Medicaid coverage than children with two citizen parents. These differences partially made up for the gaps in ESI. However, in contrast to the marginal effects estimated for ESI, once adjusting for socioeconomic characteristics, the probability of being insured under Medicaid/CHIP did not vary significantly by parental documentation status.

Sensitivity analyses: Imputed parental documentation status

I conducted sensitivity analyses to examine the coverage distribution and final adjusted models under alternative samples that excluded children with parents who had been 1) imputed by the SIPP/Census Bureau, or 2) imputed through my own hotdeck imputation because they had been missing from the 2004 topical module. In Appendix H, for each of the original coverage distribution tables and final adjusted models I present tables that display results for both for my full sample (including all children, even those whose parents' status had been imputed), and these restricted samples. There are two results worthy of mention. First, in Appendix H Table 3.9 we see that the result from the full sample that showed that citizen children with at least one undocumented parent were more likely to hold Medicaid/CHIP coverage than their counterparts with citizen/LPR

parents is no longer significant when excluding children whose parents had been imputed by the SIPP. Second, in Appendix H Table 3.14, we observe that the significant finding related to a lower likelihood ESI coverage for children with one or two undocumented parents (compared to children two citizen parents) also loses significance in the model excluding children with SIPP-imputed parental documentation status.

What do these results mean? First and foremost, by excluding children with parents whose status is imputed by the SIPP, my sample is substantially cut (by about 25%). Therefore, findings from these models likely present a biased picture of the coverage distribution by parental documentation status. Second, this loss of sample may also result in less power to detect significant findings. The magnitude in both cases remained relatively similar, yet the difference was no longer significant, suggesting this could also explain these divergent findings. Finally, in the second case (examining ESI in Table 3.14) the p-value was still marginally significant (p=.064), so these models are still picking up some level of difference. Therefore, while there were a couple results sensitive to the specification of my sample, the large loss of the sample that comes with excluding these children would argue for keeping them in to prevent biased estimates. In addition, as I mentioned in Chapter 2 (Methods), Bachmeier et al. have demonstrated that even with the high level of nonresponse and consequently imputation, national estimates of the characteristics of undocumented immigrants, specifically, are similar to those estimated from other sources.

Discussion

In this aim, similar to prior research (Graefe, no date; Ojeda & Brown, 2005; others), I found that the children of Latino immigrants experienced high rates of

uninsurance and low levels of ESI. Non-citizen children experienced the highest rates of uninsurance: over half (54.1%) were uninsured compared to 28.2% of citizen children. As expected, parental documentation status was an important predictor of coverage for both citizen and non-citizen children. Children with at least one undocumented parent had lower rates of insurance overall, demonstrating that attention to parental documentation status reveals even greater disparities than studies examining parental citizenship alone (Borjas, 2011; Brown et al., 1999; Capps et al., 2005; Ku & Matani, 2001; Durden, 2007; Huang et al., 2006; Ojeda & Brown, 2005; Perreira & Ornelas, 2011). A more fine-grained comparison in my ancillary aim of rates of coverage across citizen children with parents of varying documentation status provides insight into the lack of insurance in general and ESI, specifically. The degree of uninsurance and ESI coverage followed a strong gradient where children with two undocumented parents experienced the most vulnerability (e.g., more risk of being uninsured) and children in two-citizen parent families the least. Thirty six percent of citizen children with two undocumented parents were uninsured and only 1 in 10 held ESI coverage. In contrast, 22% of children with two citizen parents lacked coverage, but over half of them held ESI. This 14 percentage point difference in coverage between children with two citizen parents and children with undocumented parents meets the AHRQ definition of a significant healthcare disparity (AHRQ, 2014).

When examining separately, gaps in uninsurance related to both children's citizenship and parental documentation status persisted even after accounting for a number of immigration-related and socioeconomic characteristics. However, these gaps were eliminated after adjusting for SES when examining 1) the interaction between the

child's citizenship and parental documentation status in my primary aim and 2) a more comprehensive measure of parental documentation status among citizen children alone in my ancillary aim. However, in my primary aim, the gap in ESI coverage for citizen children with at least one undocumented parent – compared to those with citizen/LPR parents – was made up for by a higher probability of holding Medicaid/CHIP coverage. This was not the case in my ancillary aim. Here, the gap in ESI coverage– which persisted even after accounting for a number of important immigration-related and socioeconomic characteristics – appears to be the driving force behind disparities related to parental documentation status, and Medicaid/CHIP rates did not make up for these wide gaps. This was true among children with either one or two undocumented parents, compared to children with two citizen parents.

This supports previous studies demonstrating disparities in access to ESI, where immigrant adults and parents – in particular non-citizen and first-generation immigrants – report lower rates of ESI offers/eligibility than their counterparts (BeLue et al., 2014; Buchmueller et al., 2007). Furthermore, even non-citizen children who lack access to Medicaid/CHIP coverage in many states – and thus had no coverage options other than through employers – had very low rates of ESI, suggesting that this was not a viable option for these children either. Although further research is needed to better understand these findings, the driving force of gaps in ESI leading to higher uninsurance demonstrates that one way to significantly increase coverage among the children of immigrants is to facilitate access to coverage for parents, as well, as most children can only hold ESI through their parents.

Gaps in overall insurance coverage

As mentioned above, even after adjusting for a wide range of covariates in my full models, substantial differences in uninsurance remained between citizen and non-citizen children overall, and between children with at least one undocumented parent vs. children with citizen/LPR parents. The differences associated with children's citizenship status were greater (16.8pp) than those related to parental documentation status (5.3). Indeed, even in cases where nearly all pairwise differences between these two status variables were significant the full interaction never was. For example, in my final fully adjusted model, citizen children overall had higher probabilities of being insured and although parental documentation status led to even greater disparities among non-citizen children alone, parental documentation status did not matter for citizen children. However, prior to controlling for socioeconomic characteristics, including parental education, employment, industry, and firm size, as well as family income, parental documentation status was related to significant differences in coverage between citizen children with citizen/LPR or at least one parent who was undocumented. Thus, it appears that SES, in particular parental employment, firm size, and family income help explain the disparities related to parental documentation status and uninsurance overall.

A similar pattern was observed when examining the more complex measure of parental documentation status among citizen children alone. Again, prior to adjusting for SES, there was a significant gap in insurance between children with two undocumented parents vs. two citizen parents, which stood at 14.7 percentage points. (Insurance rates for children with at least one non-citizen but no undocumented parent and children with one undocumented parent were not statistically different from children with two citizen

parents after adjusting for immigration-related characteristics.) As in my primary aim, adjusting for SES eliminated this gap and family income, as well as parental firm size, predicted large differences in children's probability of being insured. Similar to national trends (DHHS, 2014), children with family incomes between 101-200% of FPG were the least likely to be insured. Specifically, children in this income group had a 14.4 percentage point lower probability of coverage compared to children with incomes above 300% of FPG.

Disparities in employer-sponsored health insurance

In order to further explore the role of children's citizenship, parental documentation status, and socioeconomic characteristics, I examined the probability of being covered by each type of coverage for children in working families. Thus, it is important to reiterate that there parental documentation status was not associated with any differences in the proportion of children at least one employed parent. In other words, children with undocumented parents were just as likely to have parents working.

In my ancillary aim examining citizen children in 2-parent families, socioeconomic characteristics that are generally consistent predictors of ESI coverage did not fully account for the differences in ESI rates by parental documentation status. Even when adjusting for parental education, part-time vs. full-time employment, industry, firm size, and family income, children with one or two undocumented parents still had adjusted rates of ESI 10pp lower than counterparts with two citizen parents. Importantly, socioeconomic characteristics explained the difference between children with at least one non-citizen but not undocumented parent and children with two citizen parents, as this difference between these two groups no longer significant in adjusted models.

There are several mechanisms that may underlie a lack of ESI coverage for children with undocumented parents, and a paucity of research had previously prevented an empirical explanation of these mechanisms. It could be that undocumented parents are less likely to be employed. However, again, in my sample children in undocumented families were no less likely to have at least one parent employed. Alternatively, undocumented parents sorting into different types of employment could drive differences. Overall, children in undocumented families were far less likely to have at least one parent employed in firms with mid- and high-ESI-offer rates or in firms with 100 or more employees, and parental industry by offer rates and firm size predicted differences in the probability of children being covered by ESI. However, once again it is important to reiterate that while the effect on ESI of having one or two undocumented parents was still significant even after adjusting for all of these employment characteristics. This suggests that for groups of immigrants other than those who are undocumented, standard predictors of ESI offer such as industry of employment and firm size are also good predictors of children's coverage. However, in families with undocumented parents, standard ESI offer rates do not tell the whole story. This finding in particular provided for an important direction in my qualitative interviews that resulted in rich explanations to help complete the story.

Research on ESI offer and take-up among noncitizens can also help us learn about what we might expect if we were able to examine offer and take-up among undocumented immigrants. An important study examining ESI offer and take-up in the SIPP demonstrated that citizens and non-citizens take-up ESI at the same rates when available, yet non-citizens have much lower ESI offer rates than their counterparts

(Buchmueller et al., 2007). In fact, Buchmueller et al. argued that the coverage disparity between non-citizens and U.S.-born citizens was largely explained by differences in ESI offer rate. Whether there are further disparities in ESI offer (or take-up) for undocumented immigrants, specifically, is unknown. MEPS data are the most widely-used survey data to describe ESI offers across firms and workers. Yet, in this context, data on ESI offer by firm are not entirely practical either, as it is quite possible that firms which do offer ESI to most of their employees might not extend these benefits to undocumented workers (in the case that they know their status).

Affordability of ESI coverage is likely an important issue for undocumented families, as for many families across the U.S. (Dubay et al., 2007). However, I account for this by including family income as % of FPG. As I have discussed, in my sample, over half of children in two-undocumented parent families were below 100% of FPG, which equated to a monthly income of around $1800 for a family of four in 2009 (DHHS, 2009). With the average family premium at $300/month in 2009 (AHRQ, 2010b), many families would not have been able to afford coverage. Finally, even if firms do offer affordable coverage to all employees, undocumented workers may be hesitant to accept benefits as they may fear that this will expose their status to their employer. While research examining offer and take-up rates by parental documentation status is needed to help explain my findings of substantially lower rates of ESI for children in undocumented families, qualitative research like that I present in AIM 3 informs our understanding of the unique barriers to ESI even when undocumented immigrants are offered this coverage.

Quantifying these differences in ESI by parental documentation status, as well as understanding the role of a host of other predictors, is essential both for understanding disparities and for designing policy interventions to improve access to coverage for the children of Latino immigrants. In particular, the vulnerable position of undocumented immigrants within the U.S. labor market (Passel & Cohn, 2009) – as a result of immigration policy – appears to be prohibiting their children from accessing the health insurance benefits that most Americans count on (Bloom et al., 2013). Furthermore, the safety net meant to cover citizen children who are not able to access coverage through this avenue (e.g., Medicaid/CHIP, as I discuss below) does not appear to be making up for the wide gap left by the private market, and is virtually non-existent for undocumented children.

Medicaid/CHIP

Overall reports of Medicaid/CHIP and Medicaid/CHIP participation rates – which take into account the estimated denominator of children who are potentially income-eligible – varied significantly by children's citizenship status, which was expected given that non-citizen children are only eligible for this coverage in certain states. Conversely, while Medicaid/CHIP rates overall varied significantly across parental documentation status, the *participation* rates did not, indicating that the differential rates of Medicaid/CHIP overall likely reflected the differential rates of poverty across parental documentation status. Contrary to my hypothesis, though, in my final adjusted model citizen children with at least one undocumented parent had a higher probability of reporting Medicaid/CHIP coverage than their counterparts. However, this finding is not new, and is consistent with patterns identified in both the California Health Interview

Survey (CHIS) Ponce et al., 2011), and in a separate national analysis of SIPP data by Ziol-Guest & Kalil (2012).

Not surprisingly, then, the interaction between children's citizenship and parental documentation status, unlike that of probit models predicting the probability of being insured and marginal effects predicting ESI, was significant. Children's citizenship status had a greater effect on the probability of having Medicaid/CHIP for children with at least one undocumented parent than it did for children with citizen/LPR parents. This finding is also expected because categorical eligibility is tied to citizenship status and non-citizen children with at least one undocumented parent are likely undocumented themselves and thus not eligible. Thus, given low rates of potential enrollment among these children – limited to certain states – we would expect rates among their citizen counterparts to be much higher, and expect this difference to be greater than for children with citizen/LPR parents as non-citizen children who are themselves LPRs are categorically eligible in more states. It is also not surprising that this interaction was significant for Medicaid/CHIP and not ESI, as ESI eligibility is not tied to children's own citizenship status.

Although I observed significant differences in Medicaid/CHIP by parental documentation status among citizen children in my primary aim, even in fully adjusted models, in my ancillary aim final models controlling for socioeconomic characteristics explained away the difference in Medicaid/CHIP by the four-category measure of parental documentation status. The divergent findings between these two models suggest that the binary variable only examining whether children have at least one undocumented parent may be masking disparities in access for children with two undocumented parents.

Almost half of the children in the "at least one undocumented parent" group have another parent who is citizen or legal permanent resident who may not feel fearful of or hesitant to enroll their children in public benefits. This may help offset these barriers to Medicaid /CHIP related to the other parent's lack of documentation status. On the other hand, children with undocumented parents may have a harder time accessing the system, out of parents' fear, hesitation, or confusion.

In these final ancillary aim models, large differences ranging from 11.4pp for children with at least one non-citizen but no undocumented parent to 21.2pp for children with two undocumented parents were reduced to differences not statistically different from zero. The addition of family income as a percent of FPG to the model appeared to drive most of this, which is consistent with the fact that participation rates that take into account differential poverty and eligibility did not vary by parental documentation status. In particular, family income was associated with a higher probability of coverage at each subsequently lower level of income, from 10.6pp for children between 201 and 300% FPG to 32.7pp for children at or below 100% FPG. Therefore, the income distribution – in particular the differences in the income distribution across parental documentation status – demonstrate an area of potential for increasing Medicaid/CHIP enrollment and bringing down the high uninsurance rates I observed.

Citizen children with two undocumented parents were the most likely to be income-eligible, with 51.5% living in families below the poverty line (at or below 100% of FPG), and another 37.3% had family incomes between 100 and 200% of FPG. The children in the group at or below 100% of FPG were income-eligible across all states (KMCU, 2007; KMCU, 2009), and Medicaid/CHIP programs appeared to be picking up

the majority of kids who are eligible at this level, although participation rates between 60 and 70% demonstrate that there was much room to grow at this point in time. Children between 100 and 200% of FPG were the most vulnerable to uninsurance, generally. Among these children, Medicaid/CHIP or other public program enrollment would likely have been the most viable pathway to insurance – as private coverage would be unaffordable in this income bracket (Dubay et al., 2007) – but these children may or may not have had incomes over the threshold of *Medicaid/CHIP eligibility* in their home state. In addition, while eligibility rules for *separate state-specific public programs* are more complex than what I could model here, higher levels of income eligibility in these programs could have also brought in more children in some states.

Policy implications

Due to increased Medicaid/CHIP eligibility (Goldstein, Kostova, Foltz, & Kenney, 2014) and outreach/enrollment campaigns, children's uninsurance has decreased considerably in past years. In many states, these expansion campaigns have extended eligibility to non-citizen children who are legal permanent residents of less than five years (those here over five years have always been eligible), but have not expanded coverage for non-citizen children who lack documentation status. Whether these initiatives have had an impact on disparities related to parental documentation status, in particular, is unknown as the most recent data on documentation status are those I have presented here. The Affordable Care Act (ACA) has the potential to further increase coverage among uninsured children of immigrants in general, but the exclusion of undocumented immigrants from all provisions and recent LPRs from some provisions

could actually increase disparities between immigrant children across parental documentation status.

For example, although children's Medicaid/CHIP eligibility is not directly affected by the ACA, outreach and enrollment campaigns could pick up eligible but uninsured children as families explore state or federal Marketplaces and seek navigators' assistance at community-based organizations and clinics. On the other hand, the movement of Medicaid enrollment into the Marketplace now means that information on citizenship/documentation status is sent to and verified with Department of Homeland Security (DHS). Even though parents' status would not need to be verified for citizen children's applications (Centers for Medicare & Medicaid Services (CMMS), 2014), this change could discourage some undocumented parents from enrolling their children. Contrary to my expectations, Medicaid participation rates did not vary significantly by parental documentation status across income-eligible children, but this could change over time. Perhaps most importantly, the state of children's coverage in general is currently at risk as the ACA only allocated federal funds toward the CHIP program through 2015. Fortunately, Congress recently extended this funding, but only through 2017 (fiscal year), so the fate of the program is still unclear. Whether Congress will act to again extend this funding is not clear and many children who could be cut are neither eligible for Marketplace subsidies nor have a connection to affordable ESI coverage (Goldstein et al., 2014; Kenney, 2015).

The availability of subsidies/tax credits for the purchase of coverage through Marketplaces presents an alternative for citizen and legal permanent resident children in our sample with family incomes between 200% and 400% of FPG. However,

undocumented immigrants are prohibited from participating in Marketplaces and it is not clear whether parents lacking status would be willing to enroll their citizen children – again due to data sharing with DHS despite the fact that only the documentation/citizenship status of those applying for coverage is taken into account (CMS, 2104). I learned more about these potential barriers from parents and key informants in **AIM 3.**

Provisions in the ACA may also affect access to ESI among immigrant families. In particular, the few (29%) undocumented workers who currently hold ESI (Capps et al., 2013) may risk losing this coverage under the ACA if their employers move to the SHOP (Small Business Health Options Program) Marketplace where undocumented workers are prohibited from purchasing coverage (Capps and Fix, 2013). I also demonstrate that some children with undocumented parents were covered by direct purchase insurance, but whether individual coverage outside of the Marketplaces will be viable and affordable remains to be seen. One state that is attempting to extend affordable coverage to undocumented immigrants and their families is California, where legislation to create an alternative health insurance exchange for those not eligible for the ACA was first brought forth in the 2013-14 session (SB 1005) (CA Legislature, 2014) and again in the 2014-15 session. Parents' and children's coverage were strongly associated in my sample, even for the children of undocumented immigrants. SB 1005 and other initiatives to increase access to coverage for undocumented immigrants could be a way to also decrease uninsurance among their children. These policy changes do not directly affect eligibility for citizen children. Yet, bringing the whole family into the system can be an effective means of reducing gaps in uninsurance for children in families where both parents are

undocumented. Access to viable, affordable coverage is especially necessary for non-citizen children with at least one parent who is undocumented.

Non-citizen children with at least one undocumented parent were most likely undocumented themselves and faced the greatest barriers to coverage with over half uninsured. At the time of this survey (and still recently), only four states and the District of Columbia cover all children regardless of documentation status. The fate of coverage for undocumented immigrant adults in California is still unclear. However, on June 16, 2015, California – where children had previously only been covered in certain counties – joined these four states and DC in approving coverage for all low-income children, allocating $40 million to begin providing coverage in May 2016. Considering that nearly one quarter (23%) of all undocumented children reside in California – compared to only 14% in the other states that provide coverage combined (Center for Migration Studies, 2015) – this could have a substantial impact on the overall uninsurance rate of undocumented children nationally. However, this still leaves 44 states that do not provide coverage for undocumented children, meaning two thirds of undocumented children still have no access to public health insurance. Whether this translates to lack of access to health care is a major theme explored in my qualitative work (Chapter 5: AIM 3 Findings & Discussion), where I learned that undocumented children in Minnesota are able to access preventive care at safety net clinics, but face major barriers to specialty and emergent care.

Conclusion

This chapter provides evidence of substantial disparities in insurance between citizen and non-citizen children and for the existence of several “classes” of citizen

children (Fix & Zimmerman, 2001) along a strong gradient of access to coverage related to parental documentation status. Parental documentations status is tied to a number of structural barriers that prevent the children of immigrants, especially children in families where both parents are undocumented, from accessing the health insurance coverage crucial for their present and future health and well-being (Halfon et al., 2007). A lack of access to ESI coverage appeared to be driving these disparities, but Medicaid/CHIP coverage did not always make up for the gaps left by the private market.

Table 3.1. Insurance Type and Characteristics of Children of Latino Immigrants by Children's Citizenship and Parental Documentation Status

		Citizen children				Noncitizen children				
	Total	**Parents citizens/LPRs**	**At least one parent undocumented**	**χ2**	**Total citizen children (A)**	**Parents citizens/LPRs**	**At least one parent undocumented**	**χ2**	**Total noncitizen children (B)**	**χ2 (A v. B)**
*Unweighted n (*weighted % of total*)*	***4227***	*2797* (66.8%)	*942* (22.9%)		3739	*251* (5.3%)	*237* (5.1%)		488	
Insurance type										
Uninsured	30.8%	26.9%	31.8%	***	28.2%	46.1%	62.4%	NS	54.1%	***
Employer-sponsored insurance	26.7%	33.5%	12.7%		28.2%	16.9%	9.9%		13.5%	
Public (Medicaid/CHIP)	38.8%	35.6%	53.3%		40.1%	30.0%	24.6%		27.4%	
Other private (direct purchase/other)	3.6%	3.9%	2.2%		3.5%	6.9%	3.1%		5.0%	
Medicaid/CHIP participation rates										
Among income-eligible children (*n=3224*)	47.6%	45.6%	56.9%	NS	48.9%	32.0%	36.8%	NS	33.5%	***
Among income-eligible children without private coverage (*n*=2589)	60.1%	61.1%	64.2%	NS	62.1%	39.4%	40.7%	NS	39.8%	***
Non-financial barriers/facilitators										
Child's age										
0-2 years	17.1%	16.1%	26.7%	***	18.8%	0.7%	2.9%	NS	1.8%	***
3-5 years	17.8%	16.9%	25.8%		19.2%	4.6%	6.4%		5.5%	
6-9 years	22.0%	21.3%	24.4%		22.1%	22.0%	20.6%		21.3%	
10-17 years	43.2%	45.7%	23.0%		39.9%	72.7%	70.1%		71.4%	
Female	49.2%	49.7%	50.3%	NS	49.9%	44.7%	42.3%	NS	43.5%	*
Household in metropolitan area	85.5%	85.7%	84.0%	NS	85.3%	87.5%	87.9%	NS	87.7%	NS

	Total	Citizen children: Parents citizens/LPRs	At least one parent undocumented	$\chi2$	Total citizen children (A)	Noncitizen children: Parents citizens/LPRs	At least one parent undocumented	$\chi2$	Total noncitizen children (B)	$\chi2$ (A vs. B)
<u>**Immigration-related barriers/facilitators**</u>										
At least 1 parent in U.S. 5+ yrs	89.2%	92.6%	86.2%	**	91.0%	79.1%	68.9%	NS	74.1%	***
Parental English proficiency[1]										
Not well or not at all	43.8%	36.4%	53.8%	***	40.9%	63.3%	74.5%	NS	68.8%	***
Very well or well	56.2%	63.6%	46.2%		59.1%	36.7%	25.5%		31.2%	
Linguistically isolated household[2]	17.5%	13.1%	25.7%	***	16.3%	24.3%	30.9%	NS	27.6%	***
<u>**Socioeconomic barriers/facilitators**</u>										
Parental education[3]										
Less than high school	26.1%	23.3%	30.6%	***	25.2%	34.5%	33.0%	NS	33.7%	**
High school diploma or higher	73.9%	76.7%	69.4%		74.8%	65.5%	67.0%		66.3%	
Parental employment										
No parent employed	8.5%	7.4%	11.6%	NS	8.5%	8.7%	9.1%	NS	8.9%	NS
Parent(s) only employed part-time	18.4%	17.7%	20.1%		18.3%	23.8%	14.4%		19.1%	
At least one parent employed full-time	73.1%	74.9%	68.4%		73.2%	67.5%	76.5%		71.9%	
Parental industry by avg. ESI offer rate[4]										
No parent employed	8.5%	7.4%	11.6%	***	8.5%	8.7%	9.1%	NS	8.9%	*
At least one parent employed, *but only in low ESI offer industry*	31.2%	26.0%	42.7%		30.3%	39.5%	39.3%		39.4%	
but only in mid ESI offer industry	32.0%	35.2%	24.1%		32.3%	26.7%	30.6%		28.6%	
in high ESI offer industry	28.3%	31.5%	21.6%		28.9%	25.1%	20.9%		23.0%	
Parental firm size										
No parent employed	8.5%	7.4%	11.6%	***	8.5%	8.7%	9.1%	**	8.9%	*
Parent(s) temp./contingent employee(s)	1.3%	1.2%	1.5%		1.3%	0.3%	3.0%		1.6%	
At least one parent employed, *but only in firm with under 25 employees*	31.1%	26.8%	39.1%		30.0%	29.8%	52.0%		40.8%	
but only in firm with 25-99 employees	11.9%	11.0%	14.6%		11.9%	14.8%	8.4%		11.6%	
in firm with 100 or more employees	47.2%	53.5%	33.3%		48.3%	46.4%	27.5%		37.1%	

	Total	Citizen children				Noncitizen children				χ2 (A vs. B)
		Parents citizens/LPRs	At least one parent undocumented	χ2	Total citizen children (A)	Parents citizens/LPRs	At least one parent undocumented	χ2	Total noncitizen children (B)	
Family income as % of FPG[5]										
FPG <=100%	34.5%	29.4%	44.4%	***	33.2%	38.8%	53.0%	NS	45.8%	***
FPG 101-200%	36.0%	34.9%	38.4%		35.8%	44.1%	32.0%		38.1%	
FPG 201-300%	13.9%	15.7%	10.6%		14.4%	9.7%	9.7%		9.7%	
FPG 301%+	15.5%	20.0%	6.6%		16.6%	7.4%	5.3%		6.4%	
Parental health insurance coverage[6]										
No parent is insured	39.4%	33.8%	49.4%	***	37.8%	46.0%	60.7%	NS	53.3%	***
At least one parent insured, but not thru ESI	17.9%	16.3%	21.7%		17.7%	22.9%	16.8%		19.9%	
At least one parent covered by ESI	42.7%	50.0%	28.8%		44.6%	31.1%	22.6%		26.9%	

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August-December 2007; 2008 Panel Wave 2, December 2008-March 2009

[1] Highest English language proficiency between parents

[2] Defined as household in which no person over age 14 speaks English very well

[3] Highest level of education between parents

[4] Low ESI offer rate industries: Agriculture, forestry, fishery; construction; other services
Mid ESI offer rate industries: Transportation, public utility; retail trade; professional services
High ESI offer rate industries: Manufacturing, mining; wholesale trade; finance, insurance, real estate; government, military

[5] Dept. of Health & Human Services federal poverty guidelines (FPG)

[6] Parental health insurance coverage cannot be included in probit models, as it is perfectly predictive of children's type of coverage. However, it is included here for illustrative purposes.

χ2: Chi-square test of differences, *p<.05, **p<.01, ***p<.001

Table 3.2. Rates of Coverage and Uninsurance among Children of Latino Immigrants						
	Uninsured	**Employer-sponsored insurance**	**Public (Medicaid/ CHIP)**	**Other private (direct purchase/ other)**	**Total**	
*Unweighted n (*weighted %*)*	*1291* (30.9%) Rate	*1063* (26.7%) Rate	*1745* (38.8%) Rate	*128* (3.6%) Rate	**4227**	χ2
Non-financial barriers/facilitators						
Age						
0-2 years	22.5%	26.9%	50.0%	0.6%	100%	***
3-5 years	27.6%	23.2%	46.8%	2.5%	100%	
6-9 years	31.2%	23.8%	42.0%	3.0%	100%	
10-17 years	35.3%	29.5%	29.5%	5.6%	100%	
Gender						
Female	30.7%	27.3%	38.7%	3.4%	100%	NS
Male	31.0%	26.1%	39.0%	3.9%	100%	
Metropolitan area						
Non-metro	32.8%	25.2%	39.1%	2.8%	100%	NS
Metropolitan area	30.5%	26.9%	38.8%	3.8%	100%	
Immigration-related barriers/facilitators						
Parent(s) in U.S. 5+ years						
At least one parent in U.S. 5+ years	30.1%	28.0%	38.1%	3.9%	100%	**
No parent in U.S. 5+ years	37.3%	16.3%	44.6%	1.8%	100%	
Parental English proficiency[1]						
Not well or not at all	34.7%	12.8%	50.2%	2.3%	100%	***
Very well or well	27.9%	37.5%	30.0%	4.6%	100%	
Linguistic isolation[2]						
Not linguistically isolated	30.1%	30.2%	35.7%	4.0%	100%	***
Linguistically isolated household	34.5%	10.3%	53.4%	1.8%	100%	
Socioeconomic barriers/facilitators						
Parental education[3]						
Less than high school	32.8%	13.4%	51.0%	2.8%	100%	***
High school diploma or higher	30.2%	31.4%	34.5%	3.9%	100%	
Parental employment						
No parent employed	36.4%	0.0%	61.1%	2.5%	100%	***
Parent(s) only employed part-time	34.2%	14.1%	47.2%	4.4%	100%	
At least one parent employed full-time	29.4%	33.0%	34.1%	3.6%	100%	
Parental industry by avg. ESI offer rate[4]						
No parent employed	36.4%	0.0%	61.1%	2.5%	100%	***

At least one parent employed, *but only in low ESI offer industry*	35.6%	13.4%	47.4%	3.6%	100%
but only in mid ESI offer industry	28.4%	32.2%	35.3%	4.0%	100%
in high ESI offer industry	26.7%	43.1%	26.6%	3.6%	100%
Parental firm size					
No parent employed	36.4%	0.0%	61.1%	2.5%	100% ***
Parent(s) temp./contingent employee(s)	38.0%	2.1%	55.0%	5.0%	
At least one parent employed, *but only in firm with under 25 employees*	38.9%	9.5%	47.1%	4.5%	100%
but only in firm with 25-99 employees	30.1%	21.8%	44.7%	3.4%	100%
in firm with 100 or more employees	24.5%	44.8%	27.4%	3.3%	100%
Family income as % of FPG[5]					
FPG <=100%	36.0%	5.8%	56.3%	1.9%	100% ***
FPG 101-200%	34.3%	20.3%	41.6%	3.8%	100%
FPG 201-300%	27.8%	44.0%	22.5%	5.7%	100%
FPG 301%+	30.9%	26.7%	38.8%	3.6%	100%
Parental health insurance coverage[6]					
No parent is insured	49.9%	0.0%	47.2%	2.6%	100% ***
At least one parent insured, but not thru ESI	19.4%	0.0%	72.5%	7.8%	100%
At least one parent covered by ESI	18.1%	62.1%	17.0%	2.9%	100%

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008

[1] Highest English language proficiency between parents

[2] Defined as household in which no person over age 14 speaks English very well

[3] Highest level of education between parents

[4] Low ESI offer rate industries: Agriculture, forestry, fishery; construction; other services
Mid ESI offer rate industries: Transportation, public utility; retail trade; professional services
High ESI offer rate industries: Manufacturing, mining; wholesale trade; finance, insurance, real estate; government, military

[5] Dept. of Health & Human Services federal poverty guidelines (FPG)

[6] Parental health insurance coverage cannot be included in probit models, as it is perfectly predictive of children's type of coverage. However, it is included here for illustrative purposes.

$\chi 2$: Chi-square test of differences, *p<.05, **p<.01, ***p<.001

Table 3.3. Probit Marginal Effects Models of Probability of Being Insured by Children's Citizenship Status among the Children of Latino Immigrants

N=4227	(1) unadjusted		(2) + age and immigration-related characteristics		(3) + socioeconomic characteristics	
<u>Children's citizenship status</u>	ME	SE	ME	SE	ME	SE
Citizen child	REF		REF		REF	
Noncitizen child	**-26.0*** **	**(3.0)**	**-19.2*** **	**(2.8)**	**-16.8*** **	(2.9)
<u>Child's age</u>						
0-2 years	REF		REF		REF	
3-5 years	**-5.1***	**(2.5)**	-4.4	(2.5)	-4.8	(2.5)
6-9 years	**-8.7*** **	**(2.4)**	**-6.9** **	**(2.4)**	**-7.2** **	**(2.4)**
10-17 years	**-12.8*** **	**(2.3)**	**-9.9*** **	**(2.5)**	**-11.6*** **	**(2.5)**
<u>Immigration-related facilitators/barriers</u>						
Parent(s) in U.S. 5+ yrs						
No parent in U.S. 5+ yrs	-7.0	(3.9)	-3.7	(4.2)	-3.6	(4.0)
At least one parent in U.S. 5+ yrs	REF		REF		REF	
Parental English proficiency[1]						
Not well or not at all	**-6.7***	**(2.9)**	-3.6	(3.1)	0.3	(3.3)
Very well or well	REF		REF		REF	
Household linguistic isolation[2]						
Linguistically isolated	-4.3	(3.1)	-4.2	(3.5)	-3.0	(3.5)
Not linguistically isolated	REF		REF		REF	
<u>Socioeconomic barriers/facilitators</u>						
Parental education[3]						
Less than high school	-2.6	(2.8)			3.0	(3.0)
High school diploma or higher	REF				REF	
Parental employment						
No parent employed	-7.0	(4.0)			**-8.9***	**(4.1)**
Parent(s) only employed part-time	-4.9	(3.2)			-0.9	(3.2)
At least one parent employed full-time	REF				REF	
Parental industry by avg. ESI offer rate[4]						
No parent employed	**9.7***	**(4.4)**			N/A	
At least one parent employed, *but only in low ESI offer industry*	**-8.9***	**(3.9)**			-3.2	(3.9)
but only in mid ESI offer industry	-1.8	(2.9)			0.2	(2.9)
in high ESI offer industry	REF				REF	
Parental firm size						
No parent employed	**-11.8** **	**(4.1)**			N/A	
Parent(s) temp./contingent employee(s)	12.4	(8.3)			-8.8	(7.3)
At least one parent employed, *but only in firm with under 25*	**-14.4*** **	**(3.1)**			**-9.6** **	**(3.2)**

employees					
but only in firm with 25-99 employees	-5.5	(4.0)		-3.7	(4.1)
in firm with 100 or more employees	REF			REF	
Family income as % of FPG[5]					
FPG <=100%	**-22.0*** **	**(2.9)**		**-16.4*** **	**(3.6)**
FPG 101-200%	**-20.2*** **	**(2.8)**		**-16.9** **	**(3.0)**
FPG 201-300%	**13.7** **	**(3.8)**		**-12.2** **	**(3.9)**
FPG 301%+	REF			REF	

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008

[1] Highest English language proficiency between parents

[2] Defined as household in which no person over age 14 speaks English very well

[3] Highest level of education between parents

[4] Low ESI offer rate industries: Agriculture, forestry, fishery; construction; other services
Mid ESI offer rate industries: Transportation, public utility; retail trade; professional services
High ESI offer rate industries: Manufacturing, mining; wholesale trade; finance, insurance, real estate; government, military

[5] Dept. of Health & Human Services federal poverty guidelines (FPG)

*p<.05, **p<.01, ***p<.001

All models include a dummy indicating the panel from which each child originated

Table 3.4. Probit Marginal Effects Models of Probability of Being Insured by Parental Documentation Status among the Children of Latino Immigrants

N=4227	(1) unadjusted		(2) + age and immigration-related characteristics		(3) + socioeconomic characteristics	
Parental documentation status	ME	SE	ME	SE	ME	SE
Parents citizens and LPRs	REF		REF		REF	
At least one undocumented parent	**-8.8****	**(2.5)**	**-8.7****	**(2.5)**	**-5.3***	**(2.3)**
Child's age						
0-2 years	REF		REF		REF	
3-5 years	**-5.1***	**(2.5)**	**-4.8***	**(2.4)**	**-5.2***	**(2.4)**
6-9 years	**-8.7*****	**(2.4)**	**-9.2*****	**(2.3)**	**-9.2*****	**(2.3)**
10-17 years	**-12.8*****	**(2.3)**	**-14.8*****	**(2.2)**	**-15.6*****	**(2.3)**
Immigration-related facilitators/barriers						
Parent(s) in U.S. 5+ yrs						
No parent in U.S. 5+ yrs	-7.0	(3.9)	-5.6	(3.9)	-5.6	(3.7)
At least one parent in U.S. 5+ yrs	REF		REF		REF	
Parental English proficiency[1]						
Not well or not at all	**-6.7***	**(2.9)**	-4.2	(3.1)	-0.5	(3.3)
Very well or well	REF		REF		REF	
Household linguistic isolation[2]						
Household linguistically isolated	-4.3	(3.1)	-4.4	(3.5)	-3.4	(3.5)
Household not linguistically isolated	REF		REF		REF	
Socioeconomic barriers/facilitators						
Parental education[3]						
Less than high school	-2.6	(2.8)			3.2	(3.0)
High school diploma or higher	REF				REF	
Parental employment						
No parent employed	-7.0	(4.0)			**-8.3***	**(4.1)**
Parent(s) only employed part-time	-4.9	(3.2)			-0.8	(3.3)
At least one parent employed full-time	REF				REF	
Parental industry by avg. ESI offer rate[4]						
No parent employed	**9.7***	**(4.4)**				
At least one parent employed,						
but only in low ESI offer industry	**-8.9***	**(3.9)**			-3.3	(3.9)
but only in mid ESI offer industry	-1.8	(2.9)			-0.1	(2.9)
in high ESI offer industry	REF				REF	
Parental firm size						
No parent employed	**-11.8****	**(4.1)**				
Parent(s) temp./contingent employee(s)	12.4	(8.3)			-8.2	(7.5)
At least one parent employed,						
but only in firm with under 25 employees	**-14.4*****	**(3.1)**			**-9.6****	(3.2)
but only in firm with 25-99 employees	-5.5	(4.0)			-3.2	(4.1)

in firm with 100 or more employees	REF		REF
Family income as % of FPG[5]			
FPG <=100%	**-22.0*** (2.9)**		**-16.8*** (3.5)**
FPG 101-200%	**-20.2*** (2.8)**		**-17.0*** (2.9)**
FPG 201-300%	**13.7** (3.8)**		**-11.8** (3.9)**
FPG 301%+	REF		REF

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008

[1] Highest English language proficiency between parents

[2] Defined as household in which no person over age 14 speaks English very well

[3] Highest level of education between parents

[4] Low ESI offer rate industries: Agriculture, forestry, fishery; construction; other services
Mid ESI offer rate industries: Transportation, public utility; retail trade; professional services
High ESI offer rate industries: Manufacturing, mining; wholesale trade; finance, insurance, real estate; government, military

[5] Dept. of Health & Human Services federal poverty guidelines (FPG)

*p<.05, **p<.01, ***p<.001

All models include a dummy indicating the panel from which each child originated

Table 3.5. Probit Marginal Effects Models of Probability of Being Insured by Children's Citizenship and Parental Documentation Status among the Children of Latino Immigrants

N=4227	**(1)** unadjusted		**(2)** + age and immigration-related characteristics		**(3)**+ socioeconomic characteristics	
Children's citizenship X parental documentation status	ME	SE	ME	SE	ME	SE
Child citizen - parents citizens and LPRs	**REF**		**REF**		**REF**	
Child citizen - at least one undocumented parent	-4.9	(2.7)	**-5.6***	**(2.8)**	-2.3	(2.6)
Child noncitizen - parents citizens and LPRs	**-19.2*** **	**(3.9)**	**-15.0*** **	**(4.2)**	**-12.7** **	(4.2)
Child noncitizen - at least one undocumented parent	**-35.5*** **	**(4.7)**	**-30.5*** **	**(5.0)**	**-26.0*** **	(4.8)

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008

*p<.05, **p<.01, ***p<.001

All models include a dummy indicating the panel from which each child originated

Table 3.6. Pairwise Comparison Marginal Effects and Difference-In-Difference

	Child citizen		Child noncitizen		Child citizen		Child noncitizen		Child citizen		Child noncitizen	
	Parents citizens and LPRs	At least one undoc-umented parent	Parents citizens and LPRs	At least one undoc-umented parent	Parents citizens and LPRs	At least one undoc-umented parent	Parents citizens and LPRs	At least one undoc-umented parent	Parents citizens and LPRs	At least one undoc-umented parent	Parents citizens and LPRs	At least one undoc-umented parent
Child citizen - parents citizens and LPRs												
Child citizen - at least one undocumented parent	-4.9				**-5.6***				-2.3			
Child noncitizen - parents citizens and LPRs	**-19.2*** **	**-14.3** **			**-15.0*** **	-9.4			**-12.7** **	**-10.4***		
Child noncitizen - at least one undocumented parent	**-35.5*** **	**-30.6*** **	**-16.3** **		**-30.5*** **	**-24.9*** **	**-15.5***		**-26.0*** **	**-23.5*** **	**-13.0***	
	Diff-in-diff: -19.2-(-30.6)=11.4				Diff-in-diff: -15.0-(-24.9)=9.9				Diff-in-diff: -12.7-(-23.5)=11.0			

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008

*p<.05, **p<.01, ***p<.001

Table 3.7. Multinomial Probit Marginal Effects Models of Probability of Being Insured by ESI by Children's Citizenship and Parental Documentation Status among Children in Latino Immigrant Working Families

N=3824	**(1)** unadjusted		**(2)**+ age and immigration-related barriers/facilitators		**(3)**+ socioeconomic barriers/facilitators	
Children's citizenship status	ME	SE	ME	SE	ME	SE
Child citizen	**REF**		**REF**		**REF**	
Child noncitizen	**-16.0*** **	**(3.1)**	**-9.6** **	**(3.5)**	-3.7	(2.8)
Parental documentation status	ME	SE	ME	SE	ME	SE
Parents citizens and LPRs	**REF**		**REF**		**REF**	
At least one undocumented parent	**-17.6*** **	**(1.3)**	**-16.4*** **	**(2.9)**	**-7.1** **	**(2.5)**
Children's citizenship X parental documentation status	ME	SE	ME	SE	ME	SE
Child citizen - parents citizens and LPRs	**REF**		**REF**		**REF**	
Child citizen - at least one undocumented parent	**-21.9*** **	**(2.5)**	**-16.4*** **	**(2.8)**	**-7.3** **	**(2.7)**
Child noncitizen - parents citizens and LPRs	**-17.7*** **	**(4.2)**	**-10.5* **	**(4.6)**	-3.7	(3.6)
Child noncitizen - at least one undocumented parent	**-25.3*** **	**(4.1)**	**-16.4** **	**(5.2)**	-7.6	(4.3)

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008
*p<.05, **p<.01, ***p<.001
All models include a dummy indicating the panel from which each child originated

Table 3.8. Pairwise Comparison Marginal Effects and Difference-In-Difference

	Child citizen		Child noncitizen		Child citizen		Child noncitizen		Child citizen		Child noncitizen	
	Parents citizens and LPRs	At least one undoc-umented parent	Parents citizens and LPRs	At least one undoc-umented parent	Parents citizens and LPRs	At least one undoc-umented parent	Parents citizens and LPRs	At least one undoc-umented parent	Parents citizens and LPRs	At least one undoc-umented parent	Parents citizens and LPRs	At least one undoc-umented parent
Child citizen - parents citizens and LPRs												
Child citizen - at least one undocumented parent	**-21.9*** **				**-16.4*** **				**-7.3** **			
Child noncitizen - parents citizens and LPRs	**-17.7*** **	4.2			**-10.5* **	5.9			-3.7	3.6		
Child noncitizen - at least one undocumented parent	**-25.3*** **	-3.4	-7.6		**-16.4** **	0	-5.9		-7.6	-0.3	-3.9	
	Diff-in-diff: -17.7-(-3.4)=**-14.3***				Diff-in-diff:-10.5-0=-10.5				Diff-in-diff: -3.7-(-0.3)=**-3.4**			

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008
*p<.05, **p<.01, ***p<.001

Table 3.9. Multinomial Probit Marginal Effects Models of Probability of Being Insured by Medicaid/CHIP by Children's Citizenship and Parental Documentation Status among Children in Latino Immigrant Working Families

N=3824	**(1)** unadjusted		**(2)**+ age and immigration-related barriers/facilitators		**(3)**+ socioeconomic barriers/facilitators	
Children's citizenship status	ME	SE	ME	SE	ME	SE
Child citizen	**REF**		**REF**		**REF**	
Child noncitizen	**-11.6*** **	**(3.6)**	**-12.0** **	**(3.7)**	**-14.5*** **	**(3.3)**
Parental documentation status	ME	SE	ME	SE	ME	SE
Parents citizens and LPRs	**REF**		**REF**		**REF**	
At least one undocumented parent	**11.8*** **	**(1.6)**	**8.4** **	**(2.5)**	2.8	(2.5)
Children's citizenship X parental documentation status	ME	SE	ME	SE	ME	SE
Child citizen - parents citizens and LPRs	**REF**		**REF**		**REF**	
Child citizen - at least one undocumented parent	**19.3*** **	**(3.3)**	**12.2*** **	**(3.0)**	**6.2* **	**(2.9)**
Child noncitizen - parents citizens and LPRs	-4.1	(5.2)	-6.0	(4.9)	**-9.8* **	**(4.3)**
Child noncitizen - at least one undocumented parent	**-9.8* **	**(4.6)**	**-12.6* **	**(4.9)**	**-16.6*** **	**(4.3)**

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008
*p<.05, **p<.01, ***p<.001
All models include a dummy indicating the panel from which each child originated

Table 3.10. Pairwise Comparison Marginal Effects and Difference-In-Difference

	Child citizen		Child noncitizen		Child citizen		Child noncitizen		Child citizen		Child noncitizen	
	Parents citizens and LPRs	At least one undoc-umented parent	Parents citizens and LPRs	At least one undoc-umented parent	Parents citizens and LPRs	At least one undoc-umented parent	Parents citizens and LPRs	At least one undoc-umented parent	Parents citizens and LPRs	At least one undoc-umented parent	Parents citizens and LPRs	At least one undoc-umented parent
Child citizen - parents citizens and LPRs												
Child citizen - at least one undocumented parent	**19.3*** **				**12.2*** **				**6.2* **			
Child noncitizen - parents citizens and LPRs	-4.1	**23.4*** **			-6.0	**-18.2** **			**-9.8* **	**-16.0** **		
Child noncitizen - at least one undocumented parent	**-9.8* **	**-29.1*** **	5.7		**-12.6* **	**-24.8*** **	-6.6		**-16.6*** **	**-22.8*** **	-6.8	
	Diff-in diff: -4.1-(-29.1)=**25.0** **				Diff-in-diff: -6.0-(-24.8)=**18.8** **				Diff-in-diff: -9.8-(-22.8)=**13.0* **			

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008
*p<.05, **p<.01, ***p<.001

Table 3.11. Insurance Type and Characteristics of Citizen Children of Latino Immigrants in 2-Parent Families by Parental Documentation Status

N=3034	**Total**	**Both parents citizens**	**At least one noncitizen but no undocu-mented parent**	**One parent undocu-mented**	**Both parents undocu-mented**	
*Unweighted n (*weighted % of total*)*	3034	*747* (24.5%)	*1518* (49.9%)	*351* (11.9%)	*418* (13.7%)	
Insurance type						
Uninsured	28.2%	22.0%	29.0%	28.8%	35.6%	***
Employer-sponsored insurance	31.2%	53.3%	28.8%	20.7%	9.7%	
Public (Medicaid/CHIP)	37.5%	20.4%	39.1%	47.1%	54.2%	
Other private (direct purchase/other)	3.1%	4.3%	3.1%	3.4%	0.5%	
Medicaid/CHIP participation rates						
Among income-eligible children (*n=1287*)	56.8%	48.5%	56.4%	58.5%	62.5%	NS
Among income-eligible children without private coverage (*n*=1055)	65.5%	60.4%	66.9%	65.8%	65.8%	NS
Non-financial barriers/facilitators						
Child's age						
0-2 years	19.7%	15.2%	18.1%	26.5%	27.7%	***
3-5 years	20.7%	15.2%	20.2%	26.4%	27.6%	
6-9 years	21.9%	18.2%	22.4%	23.6%	25.0%	
10-17 years	37.6%	51.4%	39.2%	23.5%	19.7%	
Female	49.3%	46.3%	50.7%	47.0%	51.3%	
Household in metropolitan area	84.7%	89.3%	83.3%	83.5%	82.7%	
Immigration-related barriers/facilitators						
At least 1 parent in U.S. 5+ yrs	92.5%	95.8%	93.1%	92.0%	84.5%	***
Parental English proficiency[1]						
Not well or not at all	43.0%	22.2%	46.0%	47.8%	64.8%	***
Very well or well	57.0%	77.8%	54.0%	52.2%	35.2%	
Linguistically isolated household[2]	15.2%	6.6%	14.3%	21.1%	28.8%	***

Socioeconomic barriers/facilitators						
Parental education[3]						
Less than high school	22.7%	8.9%	27.3%	18.1%	34.6%	***
High school diploma or higher	77.3%	91.1%	72.3%	81.9%	65.4%	
Parental employment						
No parent employed	4.0%	1.6%	4.9%	4.8%	4.6%	NS
At least one parent employed, but only part-time	17.6%	17.0%	16.2%	21.9%	20.1%	
At least one parent employed full-time	78.4%	81.4%	79.0%	73.3%	75.3%	
Parental industry by avg. ESI offer rate[4]						
No parent employed	4.0%	1.6%	4.9%	4.8%	4.6%	***
At least one parent employed,						
but only in low ESI offer industry	32.1%	21.2%	30.1%	44.3%	48.2%	
but only in mid ESI offer industry	32.3%	35.6%	34.3%	25.2%	25.6%	
in high ESI offer industry	31.6%	41.6%	30.8%	25.6%	21.7%	
Parental firm size						
No parent employed	4.0%	1.6%	4.9%	4.8%	4.6%	***
Parent(s) temp./contingent employee(s)	1.0%	0.1%	1.4%	0.7%	1.6%	
At least one parent employed,						
but only in firm with under 25 Employees	31.4%	22.2%	30.4%	32.4%	50.9%	
but only in firm with 25-99 employees	13.0%	9.9%	12.8%	17.2%	15.6%	
in firm with 100 or more employees	50.5%	66.2%	50.6%	44.8%	27.3%	
Family income as % of FPG[5]						
FPG <=100%	28.9%	20.1%	28.7%	22.2%	51.5%	***
FPG 101-200%	36.5%	20.8%	41.6%	46.9%	37.3%	
FPG 201-300%	15.9%	19.7%	15.7%	19.0%	6.9%	
FPG >300%	18.7%	39.4%	14.1%	11.9%	4.3%	
Parental health insurance coverage[6]						
No parent is insured	36.9%	20.5%	38.4%	35.6%	62.3%	***
At least one parent insured, but not thru ESI	14.3%	10.5%	14.5%	19.7%	15.1%	
At least one parent covered by ESI	48.9%	69.0%	47.2%	44.7%	22.5%	

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008

[1] Highest English language proficiency between parents

[2] Defined as household in which no person over age 14 speaks English very well

[3] Highest level of education between parents

[4] Low ESI offer rate industries: Agriculture, forestry, fishery; construction; other services
Mid ESI offer rate industries: Transportation, public utility; retail trade; professional services
High ESI offer rate industries: Manufacturing, mining; wholesale trade; finance, insurance, real estate; government, military

[5] Dept. of Health & Human Services federal poverty guidelines (FPG)

[6] Parental health insurance coverage cannot be included in probit models, as it is perfectly predictive of children's type of coverage. However, it is included here for illustrative purposes.

$\chi 2$: Chi-square test of differences by parental documentation status *p<.05, **p<.01, ***p<.001

All models include a dummy indicating the panel from which each child originated

Table 3.12. Rates of Coverage and Uninsurance among Citizen Children of Latino Immigrants in 2-Parent Families

N=3034	Uninsured	Employer-sponsored insurance	Public (Medicaid/ CHIP)	Other private (dir. pur./ other)	Total	
*Unweighted n (*weighted %*)*	*824* (28.2%)	*900* (31.2%)	*1222* (37.5%)	88 (3.1%)	3034	$\chi 2$
Non-financial barriers/facilitators						
Age						
0-2 years	21.7%	30.2%	47.5%	0.5%	100%	***
3-5 years	27.1%	26.1%	44.4%	2.5%	100%	
6-9 years	28.6%	28.7%	40.7%	2.1%	100%	
10-17 years	32.0%	36.0%	26.7%	5.3%	100%	
Gender						
Female	27.5%	32.1%	37.3%	3.1%	100%	
Male	28.8%	30.3%	37.8%	3.1%	100%	
Metropolitan area						
Non-metro	31.3%	26.4%	38.9%	3.4%	100%	
Metropolitan area	27.6%	32.1%	37.3%	3.0%	100%	
Immigration-related barriers/facilitators						
Parent(s) in U.S. 5+ yrs						
At least one parent in U.S. 5+ yrs	27.8%	32.3%	36.7%	3.2%	100%	*
No parent in U.S. 5+ yrs	32.8%	18.2%	47.3%	1.7%	100%	
Parental English proficiency[1]						
Not well or not at all	30.7%	14.2%	52.5%	2.6%	100%	***
Very well or well	26.3%	44.0%	26.2%	3.4%	100%	
Linguistic isolation[2]						
Not linguistically isolated	28.0%	34.7%	34.0%	3.3%	100%	***
Linguistically isolated household	29.3%	11.8%	57.2%	1.7%	100%	
Socioeconomic barriers/facilitators						
Parental education[3]						
Less than high school	29.2%	14.8%	52.4%	3.6%	100%	***
High school diploma or higher	27.9%	36.0%	33.2%	2.9%	100%	
Parental employment						
No parent employed	35.9%	0.0%	61.2%	2.9%	100%	***
At least 1 parent employed, but only part-time	31.6%	15.3%	49.9%	3.2%	100%	
At least 1 parent employed full-time	27.0%	36.4%	33.6%	3.1%	100%	
Parental industry by avg. ESI offer rate[4]						
No parent employed	35.9%	0.0%	61.2%	2.9%	100%	***
At least one parent employed,						
but only in low ESI offer industry	32.1%	14.2%	51.1%	2.6%	100%	
but only in mid ESI offer industry	26.4%	37.5%	33.3%	2.9%	100%	
in high ESI offer industry	25.0%	46.0%	25.1%	3.8%	100%	

Parental firm size						
No parent employed	35.9%	0.0%	61.2%	2.9%	100%	***
Parent(s) temp./cont. employee(s)	21.7%	3.7%	71.7%	2.9%	100%	
At least one parent employed,						
but only in firm with under 25 employees	36.6%	10.9%	48.6%	3.9%	100%	
but only in firm with 25-99 employees	26.0%	23.8%	47.0%	3.1%	100%	
in firm with 100 or more employees	23.0%	48.8%	25.6%	2.6%		
Family income as % of FPG[5]						
FPG <=100%	32.2%	6.9%	59.1%	1.8%	100%	***
FPG 101-200%	32.4%	22.5%	42.2%	2.8%	100%	
FPG 201-300%	27.1%	46.3%	21.7%	4.9%	100%	
FPG >300%	14.5%	73.1%	8.4%	4.0%	100%	
Parental health insurance coverage[6]						
No parent is insured	45.3%	0.0%	52.5%	2.0%	100%	***
At least one parent insured, but not thru ESI	20.4%	0.0%	72.2%	7.3%	100%	
At least one parent covered by ESI	17.5%	63.7%	16.1%	2.7%	100%	

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August-December 2007; 2008 Panel Wave 2, December 2008-March 2009

[1] Highest English language proficiency between parents

[2] Defined as household in which no person over age 14 speaks English very well

[3] Highest level of education between parents

[4] Low ESI offer rate industries: Agriculture, forestry, fishery; construction; other services
Mid ESI offer rate industries: Transportation, public utility; retail trade; professional services
High ESI offer rate industries: Manufacturing, mining; wholesale trade; finance, insurance, real estate; government, military

[5] Dept. of Health & Human Services federal poverty guidelines (FPG)

[6] Parental health insurance coverage cannot be included in probit models, as it is perfectly predictive of children's type of coverage. However, it is included here for illustrative purposes.

χ2: Chi-square test of differences by insurance coverage *p<.05, **p<.01, ***p<.001

All models include a dummy indicating the panel from which each child originated

Table 3.13. Unadjusted and Adjusted Differences in Health Insurance Coverage by Parental Documentation Status among U.S.-Born Children of Latino Immigrants in 2-Parent Families

N=3034	**(1)** unadjusted		**(2)**+ age and immigration-related characteristics		**(3)**+ socioeconomic characteristics	
Children's citizenship status	ME	SE	ME	SE	ME	SE
Both parents citizens						
At least one parent noncitizen, but no parent undocumented	-7.0	(3.8)	-6.9	**(3.9)**	-3.9	(4.0)
One parent undocumented	-6.8	(4.7)	-8.0	**(4.8)**	-4.1	(4.8)
Both parents undocumented	**-13.6***	**(5.7)**	**-14.7***	**(6.1)**	-8.3	(5.9)

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008
See Appendix Table 3.9 for full model coefficients, tests of significance, and marginal effects
*p<.05, **p<.01, ***p<.001

Table 3.14. Multinomial Probit Marginal Effects of Parental Documentation Status on Type of Coverage among the Citizen Children in Latino Immigrant Working 2-Parent Families

N=2893 **ESI**	**(1)** unadjusted		**(2)**+ age and immigration-related characteristics		**(3)**+ socioeconomic characteristics	
Parental documentation status	ME	SE	ME	SE	ME	SE
Both parents citizens						
At least one parent noncitizen, but no parent undocumented	**-23.9*** **	**(4.1)**	**-15.9*** **	**(4.1)**	-4.0	(3.5)
One parent undocumented	**-32.4*** **	**(4.6)**	**-23.4*** **	**(4.7)**	**-10.5***	**(4.2)**
Both parents undocumented	**-44.0*** **	**(4.2)**	**-32.2*** **	**(4.9)**	**-10.6***	**(4.8)**
Medicaid/CHIP						
Parental documentation status	ME	SE	ME	SE	ME	SE
Both parents citizens						
At least one parent noncitizen, but no parent undocumented	**18.2*** **	**(3.1)**	**11.4** **	**(3.3)**	3.7	(3.7)
One parent undocumented	**26.2*** **	**(5.8)**	**17.2** **	**(5.8)**	9.4	(5.8)
Both parents undocumented	**34.5*** **	**(5.2)**	**21.2*** **	**(5.3)**	6.5	(5.2)

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008
See Appendix Table 3.9 for full model coefficients, tests of significance, and marginal effects
*p<.05, **p<.01, ***p<.001

CHAPTER 4. ACCESS TO PRENATAL COVERAGE AS A MEANS TO REDUCING COVERAGE DISPARITES FOR CITIZEN CHILDREN WITH UNDOCUMENTED PARENTS

Chapter summary

In **AIM 1**, where I examined coverage disparities by parental documentation status, I observed that citizen children with at least one undocumented parent were significantly more likely to be uninsured than children with citizen/LPR parents. While a national-level analysis was informative because of the lack of information on disparities overall, the great variation in state-level immigration and health care policy necessitates a framework that recognizes this variation and seeks to understand it. Here in **AIM 2**, I test whether state-level policy on prenatal coverage for (income-eligible) undocumented immigrants modifies the effect of parental documentation status on citizen children's coverage. Examination of access to prenatal coverage in particular was a direct result of findings from **AIM 3**, as I discuss in Chapter 2 (Methods) and in the next Chapter (5, **AIM 3**). Here, in **AIM 2**, I find that state-level access to prenatal coverage – on a macro-, policy-level – indeed works as moderator in this relationship.

In states where prenatal coverage is available to all income-eligible immigrants regardless of documentation status (hereby referred to as "accessible" states), uninsurance rates were equal between children with at least one undocumented parent and children with citizen/LPR parents. On the other hand, in states that restrict Medicaid

eligibility to "qualified" immigrants[27] (hereby referred to as "restrictive" states), children with at least one undocumented parent had a 16.4 percentage point (pp) higher uninsurance rate (13pp-15pp in adjusted models) than their counterparts with citizen/LPR parents. Furthermore, while there was no difference in coverage rates between children with citizen/LPR parents in accessible vs. restrictive states, children with at least one undocumented parent in restrictive states had an 18.3pp higher uninsurance rate (15pp-18pp in adjusted models) than their counterparts in accessible states. This difference is almost entirely related to lower rates of Medicaid for children with at least one undocumented parent in restrictive states, compared to those reported by children with at least one undocumented parent in accessible states.

Distribution of coverage across the immigrant access to coverage index

First, as I described in Chapter 2 (Methods), I examined the coverage distribution across my full immigrant access to coverage index by parental documentation status. Overall, 28.2% of citizen children were uninsured (in the 30 states with sufficient sample size for multilevel modeling (N=3615)). Forty percent were covered by Medicaid/CHIP, 28.5% by ESI coverage, and 3.3% had direct purchase or other private coverage (see Figure 4.1). Disparities in uninsurance by parental documentation status varied significantly across the four levels of my access index. Across every level of the index, except the second, children with at least one undocumented parent were more likely to be uninsured ($p<.05$) (see Table 4.1).

As seen in Figure 4.1, the insurance disparity within each level was attributable to differences in both ESI and Medicaid/CHIP coverage. Within the most restrictive level of

[27] Qualified immigrants are legal permanent residents (LPRs) of less than 5 years are also excluded from prenatal coverage in some states, refugees, and asylees, among other groups. (ASPE, 2012)

my index, where the insurance disparity by parental documentation status was the greatest, I observed a 17.4pp gap in uninsurance ($p<.001$) despite the fact that children with at least one undocumented parent had a 11.6pp higher Medicaid/CHIP rate ($p<.05$). This is due to the fact that the gap in ESI (23.9pp, $p<.001$) surpassed the difference in Medicaid/CHIP. In fact, at every level Medicaid/CHIP rates were higher for children with at least one undocumented parent than for children with citizen/LPR parents, but the large gap in ESI across each level (besides the second) canceled out the Medicaid differences. As I discuss in Chapter 2 (Methods), this is important because my access index reflects Medicaid/CHIP policy alone. Based on my hypothesis I would have expected these uninsurance differences to reflect lower Medicaid/CHIP rates for children with at least one undocumented parent. Certainly Medicaid/CHIP is not making up for the gaps in ESI, just as I found in AIM 1, but there is no clear pattern that indicates this relationship works differently across levels of the index.

Another way of understanding these disparities is to measure coverage differences between children with the same parental documentation status across the index. For example, in the least restrictive index, where I observe the lowest rate of uninsurance for children with at least one undocumented parent, 58.4% of children with at least one undocumented parent have Medicaid and 16.9% ESI. In the most restrictive index, children with at least one undocumented parent have a 45.0% Medicaid/CHIP and 9.8% ESI rate. The difference in the Medicaid/CHIP rate certainly contributes more to the overall 20.9pp insurance disparity (not shown) between children with at least one undocumented parent in the least vs. most restrictive states, but differences in ESI do as well. Furthermore, it is again difficult to attribute these differences to my hypothesis

because the difference between the most and least restrictive states for children with citizen/LPR parents is also great and very similar.

As I did in AIM 1, I also restricted these estimates to only children who appear to be eligible for Medicaid/CHIP to account for the fact that children with at least one undocumented parent are more likely to be income-eligible. I explored several different ways of organizing my index, as well.[28] Under each of these alternative universes and analyses, I still observed the same (lack of) pattern between Medicaid/CHIP participation rates, parental documentation status, and my index. Finally, not surprisingly given that these differences are driven by both ESI and Medicaid/CHIP, the direction of disparities I would have expected – smaller in less restrictive states and larger in more restrictive – is not consistent with my hypothesis. Therefore, I did not pursue multivariate models examining this index further.

State-level policy on immigrant access to prenatal coverage and differences in children's insurance

As seen in Figure 4.2, there were no differences in uninsurance rates by parental documentation status in states that cover pregnant women regardless of status. In these "accessible" states, both children with at least one undocumented parent and their counterparts had an uninsurance rate of 26%. In states where undocumented pregnant women are not eligible for Medicaid prenatal coverage (restrictive states), 44.7% of citizen children with at least one undocumented parent were uninsured, 16.4pp higher than children with citizen/LPR parents ($p<.001$). Furthermore, as seen in Table 4.2, there

[28] These included testing how my distribution looked when including California in the first vs. second level (due to the fact that many counties in CA cover undocumented children, but not the entire state as was necessary for inclusion in the first level of my index), and combing the second and third levels.

were also large differences between accessible vs. restrictive states for children with at least one undocumented parent (18.3pp lower for children in restricted states, p<.001). In fact, children with at least one undocumented parent in restrictive states had significantly higher rates of uninsurance than all other groups, and each of the three other groups had uninsurance rates not statistically different from one another. For example, the rate of uninsurance between children with at least one undocumented parent in accessible states vs. children with citizen/LPR parents in restrictive states is only 1.9pp and not statistically significant.

Similar to the distribution of coverage for my full index, there were large differences in type of coverage by parental documentation status. However, contrary to the distribution in my full index, uninsurance differences for children with at least one undocumented parent between accessible vs. restrictive states were clearly driven by Medicaid/CHIP, with no difference in ESI and only a small difference in direct purchase/other private coverage (see Figure 4.3). As seen in Table 4.3, even though children with at least one undocumented parent in restrictive states had an almost equal rate of ESI as their counterparts in restrictive states, their rate of Medicaid/CHIP was substantially lower (16.5 pp lower, p<.01, this difference/test not shown). Thus, it appears that the uninsurance difference is driven by differential Medicaid participation rates, which is important for my hypothesis.

I once again examined this bivariate distribution for those children who I estimated to be income-eligible for Medicaid and found that the uninsurance rate increased slightly for children in accessible states, increased more for children with citizen/LPR parents in restrictive states, and decreased for children with at least one

undocumented parent in restrictive states. Still, the significant difference in Medicaid participation rates between children with at least one undocumented parent in accessible vs. restrictive states remained; and even though children with at least one undocumented parent in restrictive states had a higher ESI rate than those in accessible states, the significant overall insurance disparity persisted.

Comparing across the two indices (full and prenatal), we see that in both cases in the most restrictive states, Medicaid/CHIP did not make up for the large gaps left by ESI. However, in the full index case, the rate of ESI for children with at least one undocumented parent was much lower than it was for children with at least one undocumented parent in the least restrictive (accessible) states. In contrast, the ESI rate was nearly identical for children with at least one undocumented parent in both levels of the prenatal coverage index, suggesting that differential participation in Medicaid help explain disparities in the latter case. That could be the case with the former, but the lower rates of ESI make it more difficult to make the assertion.

Estimation

In order to test my hypothesis on the moderating effect of state-level immigrant access to prenatal coverage I first use multilevel modeling. Given the complexity associated with model fit in multilevel modeling, I run several models to discern whether a) multilevel modeling is indeed appropriate for the structure of my data (children within states and a cross-level interaction) and b) general inferences are sensitive to the inclusion vs. exclusion of survey weights.

The first issue is a concern because multilevel modeling is significantly more complex than modeling at a single level because it relies on many more assumptions and

results are highly dependent on how well the model is specified (Primo, Jacobsmeier, & Milyo, 2007). One way to determine whether multilevel modeling is necessary is to estimate the intraclass correlation coefficient (ICC) (between-cluster variance ÷ total variance), or the variance in outcomes between level-2 clusters (in my case, states). A high ICC indicates that variance between clusters is greater than variance within clusters, suggesting that the data are indeed correlated within clusters (states). Because the moderator I am testing is at the state-level (in other words, it is a level-2 variable), in theory I expect that variance between states should be higher than the variance among children in the same state. If the ICC is in fact large and I do not account for this, my standard errors can be biased, increasing the risk of Type 1 errors (e.g., overstating the statistical significance of my findings and thus rejecting a null hypothesis when I should not) (Primo et al., 2007).

The second issue stems from the fact that multilevel modeling software has not traditionally included survey weights in estimation – which are necessary to produce unbiased estimates, and even today analysts are limited to the few programs that do allow for this. Furthermore, most public-use nationally representative datasets – such as the SIPP data I use here – only provide individual-level (level 1) weights, as opposed to higher-level (e.g., state-level) weights that are also necessary in multilevel models. There are methods for analysts to create their own level-2 scaled weights to include in these models, which are especially necessary with smaller cluster sizes such as those in my data. However, the programs that support survey weights are computationally more complex and much, much slower (e.g., gllamm in Stata) than alternative programs that support multilevel modeling (e.g., meprobit in Stata) (Carle, 2009).

I had three options to address these issues:

1. **Gllamm** (general linear latent and mixed models) with level-1 and level-2 weights: Prior to the release of Stata 14.0 in April 2015, gllamm was the only command in Stata that allowed users to include survey weights when estimating multilevel models. To create the level-2 weights necessary for multilevel models, I followed Carle (2009). The first creates a scaled weight that sums to the sample size of the level-2 cluster (e.g., state). The second sums the weights to the "effective" size of the cluster. I attempted to use gllamm to estimate a random coefficients probit model, as I describe in Chapter 2 (Methods), including these weights. Gllamm is considerably more flexible than other multilevel programs, yet with this flexibility comes uncertainty; and parameter and variance estimates depend greatly on model specifications (Primo et al., 2007). Unfortunately, the models I ran with the recommended adaptive quadrature maximum likelihood estimation and the 2 level weights would not converge, likely due to 1) too few clusters (states) and 2) too many covariates, especially because I include a cross-level interaction (Primo et al., 2007). Because these models would not converge, I ran the two alternative models described below and compared estimates and inferences from each.
2. **Meprobit** with no survey weights: According to Carle (2009), the next best option to running multilevel models with scaled survey weights is to run multilevel models without survey weights (as opposed to running a one-level model *with* survey weights, as I do in option #3).[29] Meprobit is less complex and much more efficient

[29] I also ran gllamm with adaptive quadrature and without weights; this produced nearly identical findings.

than gllamm, but as of Stata 13.0 did not allow for the inclusion of survey weights. I again fit a random coefficients probit model here.[30]

3. **Svy: probit** with survey weights and accounting for survey clusters and strata: Finally, because the ICC in the meprobit models was fairly low (ranging from 6.0% to 15.0%), one-level models should produce unbiased variance estimates and hence correct inferences as to the significance of the findings. Hence, I also ran a one-level probit model with the same interaction term as in the previous two. I ran fully adjusted models for models (2) and (3), estimating children's probability of being uninsured. I restrict all my analyses to the 3615 children in the 30 states with sufficient sample for multilevel modeling in order to be able to compare findings across models. Due to these same restrictions, I am not able to use multinomial models to estimate the probability of holding each type of coverage. I present predicted probabilities and marginal effects in this chapter and then present full coefficient models in Appendix I.

Adjusted differences in uninsurance

Estimates from the two models for the most part were consistent with unadjusted uninsurance rates across accessible vs. restrictive states and by parental documentation status. As seen in Figure 4.4 – which compares unadjusted and adjusted rates – even after adjusting for several individual- and state-level covariates, the pattern of uninsurance remained the same. Most importantly, children with at least one undocumented parent in restrictive states were consistently the most likely to be uninsured, with uninsurance estimates for this group at 40% or higher across the models. In addition, just as in the

[30] I model the covariance as unstructured, meaning I do not make the assumption that the intercept variance and slope variance are independent of each other.

unadjusted estimates, there were still no significant differences between the three other groups. The statistical significance and magnitude of difference did vary across the two models, however (see Table 4.4). In the unweighted multilevel (meprobit) models, differences by parental documentation status within restrictive states (14.4pp, p=.050) and differences between children with at least one undocumented parent in accessible vs. restrictive states (12.8pp, p=.055) were only significant at the 90% level. In the weighted one-level models accounting for the complex survey design (svy: probit), differences were more on par with the weighted, unadjusted bivariate estimates and were significant at the 95% level or better.

Finally, in order to ensure that restricting my analyses to the 30 states with sufficient sample did not bias my estimates, I also conducted sensitivity testing with the full sample of citizen children (N=3739) for the bivariate analyses and svy: probit models, which do not need to be constrained to the same sample as mulitevel modeling. These produced consistent findings and again children with at least one undocumented parent in restrictive states faced substantially higher uninsurance rates than each of the three other groups (see Appendix J).

Discussion

In recognition of the great variation in state-level policy on immigrant access to public coverage, my purpose in **AIM 2** was to understand whether an index of these polices modified the effect of parental documentation status. In response to qualitative interviews in **AIM 3**, I honed in on one particular policy that parents and key informants consistently reported as a key factor in securing Medicaid/CHIP for citizen children - access to prenatal coverage regardless of documentation status. I learned from parents

and key informants that access to prenatal coverage was an important buffer to the potential fear, hesitation, or confusion that undocumented parents could have felt in signing up their citizen children for coverage, had they not been connected to the system through prenatal coverage before their child was born. During this time, they learned about the child's eligibility for coverage, despite the parents' documentation status, and felt less worried that taking up these public benefits would negatively affect them.

In support of this narrative, I find here in **AIM 2** that even after controlling for individual- and state-level covariates and clustering within states (although small), children with at least one undocumented parent in "restrictive" states that do not extend prenatal coverage to women regardless of immigration status (e.g., do not cover undocumented immigrants) had substantially greater uninsurance rates than their counterparts with citizen/LPR parents. Furthermore, they were also much more likely to be uninsured than both children with at least one undocumented parent and those with citizen/LPR parents in "accessible" states that do extend this coverage. **AIM 1** identified lesser disparities between citizen children by parental documentation status, and probabilities of being insured were no longer significant after adjusting for immigration-related and socioeconomic characteristics. National estimates may be driven by more accessible states netting out the huge disparity experienced by those in restrictive states; such a revelation demonstrates the value of state-level analyses and an ecological model that highlight the influence of structural factors, both for understanding disparities and designing policy solutions.

Before discussing the implications and policy recommendations, I must note again that all the children in this particular analysis were citizen children who are eligible

for public programs, so any effect reflects latent mechanisms related to parental documentation status. It is entirely possible that this particular state-level policy variable is actually picking up or serving as a proxy for other polices or structural factors within accessible vs. restrictive states. Yet, regardless of the underlying mechanism at work in the 34 restrictive states, an enormously high percentage of children with at least one undocumented parent were without insurance; a disparity not experienced by children in the 16 states + DC where prenatal coverage is accessible to all women regardless of documentation status.

While more work is needed to further probe this disparity and its origins, these findings reveal that undocumented families' life experiences are profoundly different based on the state they call home. Research from New York Academy of Medicine in the early 2000s observed a similar phenomenon related to prenatal coverage and documentation status (Bauer, Collins, Doyl, Fuld, & Fuentes-Afflick, 2002). In particular, Bauer et al. found that Latina mothers in New York, California, and Florida had markedly different experiences applying for Medicaid/CHIP prenatal coverage. In California, 1 in 2 women reported fear related to their documentation status, compared to 1 in 3 in Florida, and 1 in 10 in New York. New York was one the of the first states to extend prenatal coverage regardless of immigration status and in 2002 had recently implemented a simplified approach to Medicaid/CHIP applications at prenatal clinics that consisted of a single form and did not require a social security number. In California, in contrast, immigrant communities were still reeling from a wave of anti-immigrant legislation in the 1990s that had created a lasting fearful environment (Bauer et al., 2002; Park, 2011). The situation in 2007 and 2008 and today has no doubt changed

considerably. However, these contrasts between states in Bauer et al.'s study demonstrate additional factors that may be at work in the disparities that emerged in my analysis.

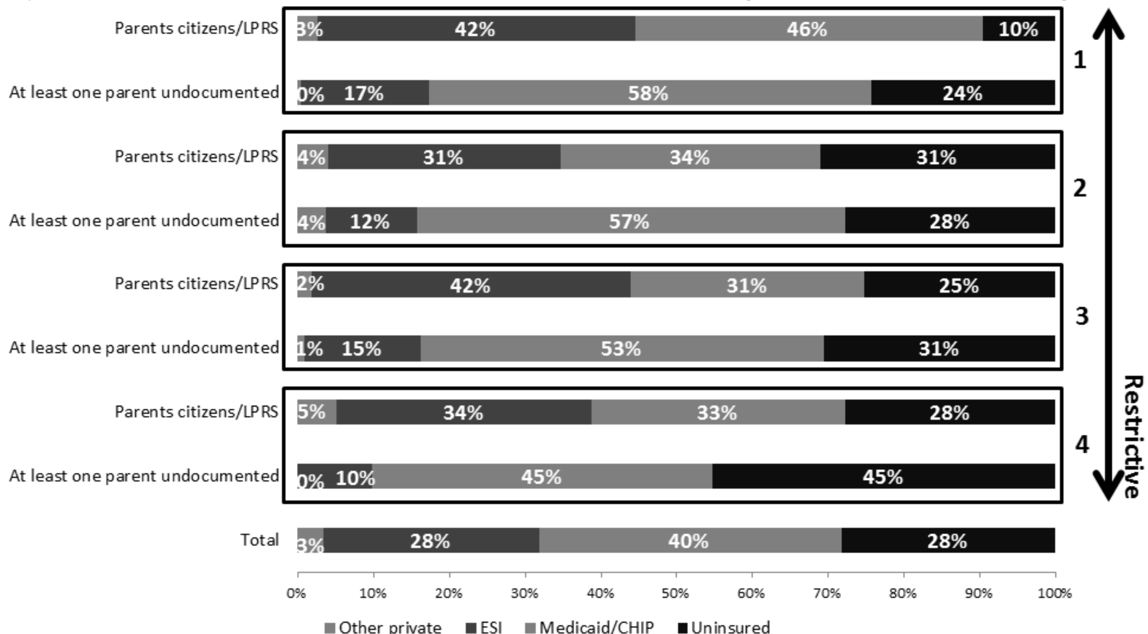
I have described the variation in state-level health care policy specific to immigrant access, but other legislation targeted at immigrant communities – whether adversely or favorably – could also have a significant impact on whether or to what degree documentation status presents itself as a barrier to children's coverage. Legislation regarding local immigration enforcement, employment, access to identification/driver's licenses, public education, and migrant workers varies wildly across states (National Council of State Legislatures (NCSL), 2009). In 2007 and 2008 (the years from which my data originate), in particular, the NCSL asserted that states were "tackling immigration issues…at an unprecedented rate," with 1562 bills introduced in 2007 and 1305 in 2008. The ability of undocumented immigrants to go about their daily lives and access resources for their children are clearly influenced by these diverse polices.

Apart from this effect of access to prenatal coverage on citizen children's coverage, prenatal care is of utmost importance for the health of the mother herself and her child (Dollfus, Patetta, Siegel, & Cross, 1990; Ghulmiyyah & Sibai, 2012; Lu, Lin, Prietto, & Garite, 2000). Disparate access to or delayed initiation of prenatal care can have profound health consequences (Dollfus et al., 1990; Ghulmiyyah & Sibai, 2012; Lu et al., 2000), and mothers miss out on an important opportunity to be connected to a wealth of resources beyond health care. Despite these critical implications, since 2008, no additional states have taken the steps to expand access to comprehensive prenatal coverage regardless of documentation status. This is the case even though states receive a 100% federal match for this coverage through the CHIP Unborn Child Option, suggesting

that political factors may be at play in preventing states from taking up a relatively inexpensive and critical initiative (Fortuny & Chaudry, 2012).

The fact that citizen children in undocumented families in several states are not able to access the benefits that their counterparts in more accessible states can also calls for federal policy to equalize access across states. Rather than only extending coverage through this optional match, the federal government could end PRWORA restrictions, if even for undocumented pregnant women. This would help more women access the comprehensive, quality prenatal care so crucial for maternal and child outcomes and – as this analysis suggests – ensure that children are also connected to the system despite their parents' documentation status.

Figure 4.1. Distribution of Coverage among the Citizen Children Latino Immigrants by Parental Documentation Status and Index of Immigrant Access to Coverage



Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008

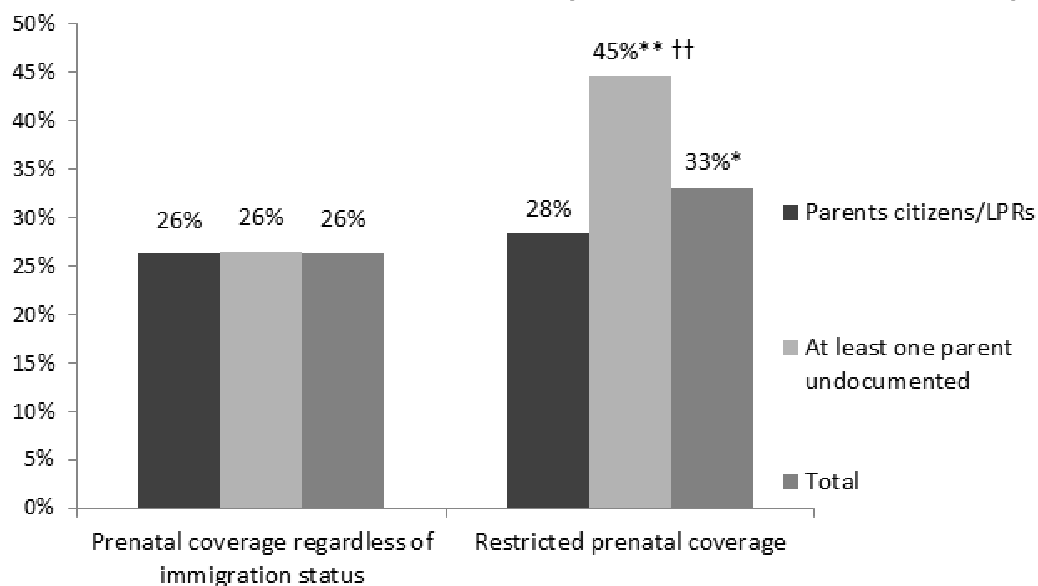
Table 4.1. Distribution of Coverage among the Citizen Children Latino Immigrants by Parental Documentation Status and Index of Immigrant Access to Coverage

	1			2			3			4		
	Parents citizens/LPRS	At least one parent undocumented	Diff.	Parents citizens/LPRS	At least one parent undocumented	Diff.	Parents citizens/LPRS	At least one parent undocumented	Diff.	Parents citizens/LPRS	At least one parent undocumented	Diff.
Uninsured	9.6%	24.3%	**14.7%** *	31.1%	27.8%	**-3.3%** NS	25.3%	30.6%	**5.3%** NS	27.8%	45.2%	**17.4%** ***
ESI	41.9%	16.9%	**-25.0%** **	30.8%	12.0%	**-18.7%** ***	42.1%	15.3%	**-26.8%** **	33.6%	9.8%	**-23.9%** ***
Medicaid	45.9%	58.4%	**12.5%** NS	34.2%	56.6%	**22.3%** ***	30.8%	53.2%	**22.4%** *	33.4%	45.0%	**11.6%** *
Other private	2.6%	0.4%	**-2.2%** *	3.9%	3.6%	**-0.3%** NS	1.8%	0.9%	**-1.0%** NS	5.1%	0.0%	**-5.1%** *
Total	100.0%	100.0%		100.0%	100.0%		100.0%	100.0%		100.0%	100.0%	

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August-December 2007; 2008 Panel Wave 2, December 2008-March 2009

*p<.05, **p<.01, ***p<.001

Figure 4.2. Uninsurance among the Citizen Children of Latino Immigrants by Parental Documentation Status and Immigrant Access to Prenatal Coverage

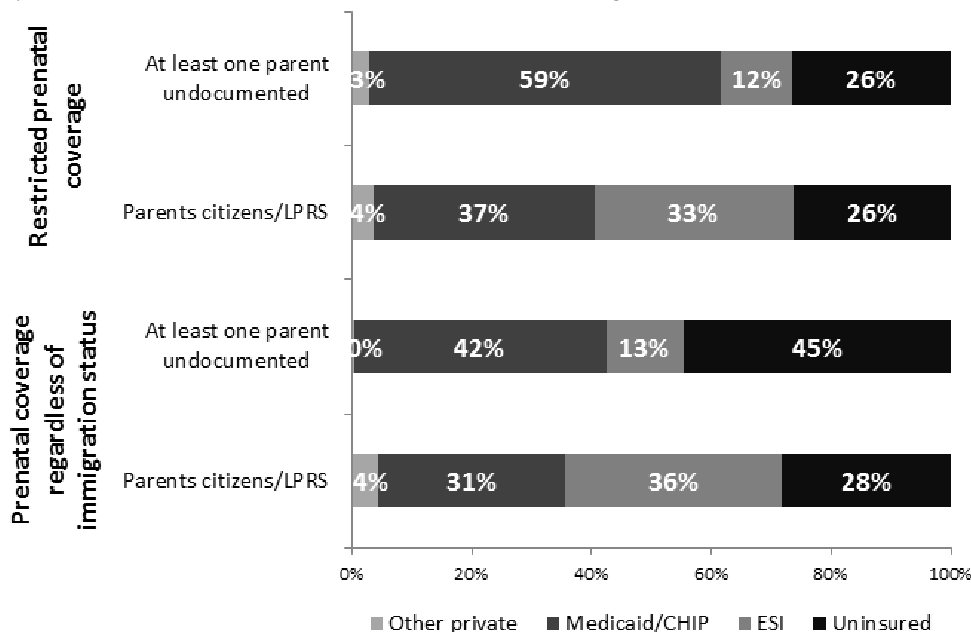


Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008
Difference by parental documenation status within state group *p<.05, **p<.01, ***p<.001
Difference by state group for children with same parental documentation status †p<.05, ††p<.01, †††p<.001

Table 4.2. Unadjusted Differences in Uninsurance by State-Level Prenatal Coverage and Parental Documentation Status

Unadjusted differences	**Prenatal coverage regardless of immigration status**		**Restricted prenatal coverage**	
	Parents citizens/LPR	At least one parent undoc-umented	Parents citizens/LPR	At least one parent undoc-umented
Prenatal coverage - Parents citizens/LPRs				
Prenatal coverage - At least one parent undocumented	-0.1			
Restricted - Parents citizens/LPRs	-2.0	-1.9		
Restricted - At least one parent undocumented	**-18.4*** **	**-18.3*** **	**-16.4** **	

Figure 4.3. Coverage Distribution among the Citizen Children of Latino Immigrants by Parental Documentation Status and Immigrant Access to Prenatal Coverage



Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008

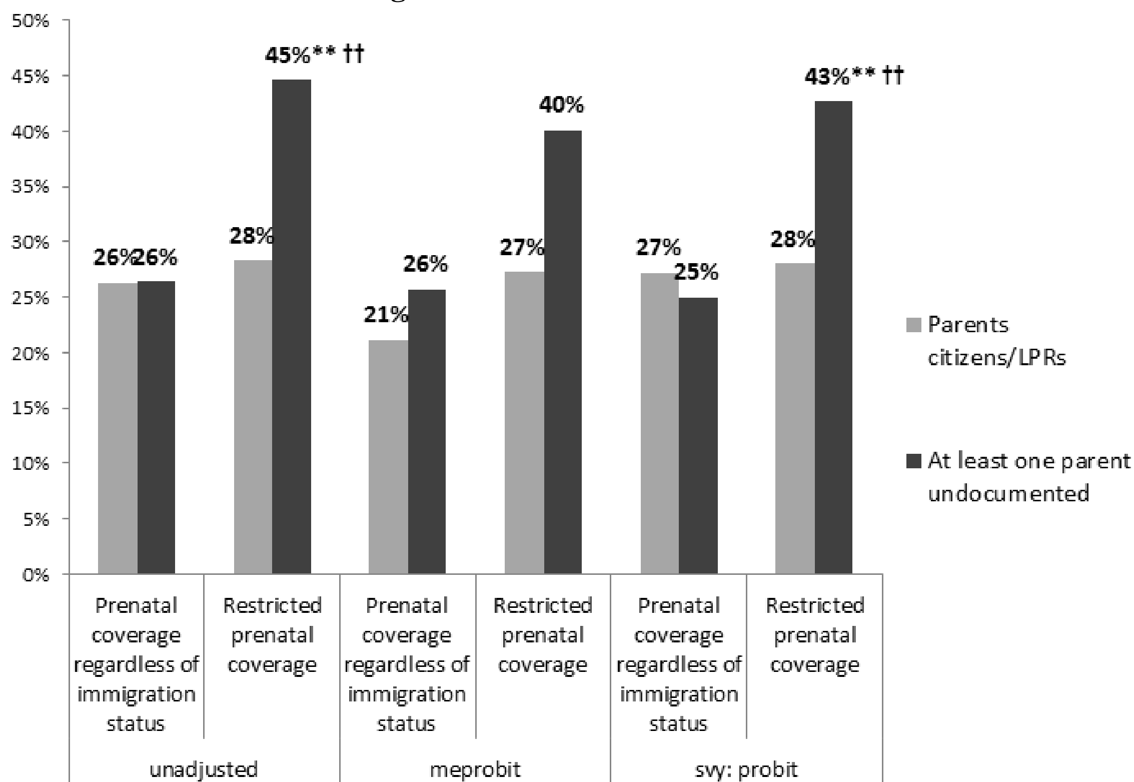
Table 4.3. Coverage Distribution among the Citizen Children of Latino Immigrants by Parental Documentation Status and Immigrant Access to Prenatal Coverage

	Prenatal coverage regardless of immigration status			Prenatal coverage restricted		
	Parents citizens/LPRs	At least one parent undocumented	Difference	Parents citizens/LPRs	At least one parent undocumented	Difference
Uninsured	26.3%	26.4%	-0.1% NS	28.3%	44.7%	**-16.4%****
ESI	33.3%	12.1%	**21.2%*****	36.1%	12.9%	**23.2%*****
Medicaid/CHIP	36.8%	58.6%	**-21.8%*****	31.2%	42.1%	**-10.9%***
Other private	3.6%	2.9%	0.7% NS	4.4%	0.3%	**4.1%****

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008

*p<.05, **p<.01, ***p<.001

Figure 4.4. Unadjusted Uninsurance Rates and Adjusted Predicted Probabilities by State-Level Prenatal Coverage and Parental Documentation Status



Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008
Difference by parental documenation status within state group *p<.05, **p<.01, ***p<.001
Difference by state group for children with same parental documentation status †p<.05, ††p<.01, †††p<.001

Table 4.4. Unadjusted Differences and Marginal Effects by State-Level Prenatal Coverage and Parental Documentation Status

Meprobit marginal effects: unweighted, unstructured covariance matrix	**Prenatal coverage regardless of immigration status**		**Restricted prenatal coverage**	
	Parents citizens/LPRs	At least one parent undocumented	Parents citizens/LPRs	At least one parent undocumented
Prenatal coverage - Parents citizens/LPRs				
Prenatal coverage - At least one parent undocumented	-5.2			
Restricted - Parents citizens/LPRs	-6.8	-1.6		
Restricted - At least one parent undocumented	**-19.5****	-14.4 (p=.050)	-12.8 (p=.055)	

Svy: probit marginal effects: weighted, accounting for clustering/stratification	**Prenatal coverage regardless of immigration status**		**Restricted prenatal coverage**	
	Parents citizens/LPRs	At least one parent undocumented	Parents citizens/LPRs	At least one parent undocumented
Prenatal coverage - Parents citizens/LPRs				
Prenatal coverage - At least one parent undocumented	2.3			
Restricted - Parents citizens/LPRs	-0.7	-3.0		
Restricted - At least one parent undocumented	**-15.5***	**-17.8****	**-14.8****	

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008

*p<.05, **p<.01, ***p<.001

All models adjusted for individual-level covariates (child's age, parental length of time in U.S., parental English proficiency, household linguistic isolation, parental education, parental employment, parental industry, parental firm size, family income as % FPG) and state-level covariates (% Latino, % foreign-born (FB), % growth in FB population, % non-citizen, and % of noncitizens who are undocumented

CHAPTER 5. UNDERSTANDING COVERAGE DISPARITIES AMONG THE CHILDREN OF LATINO IMMIGRANTS

Chapter summary

I embarked on this qualitative aim with the objective of exploring and better understanding the relationship between parental documentation status, children's citizenship, and access to coverage and care. In particular, I wanted to obtain context and identify potential mechanisms that could help explain findings in AIM 1 and 2. In AIM 1, I learned that substantial coverage disparities exist by both children's citizenship and parental documentation status. Non-citizen children experience enormously high rates of uninsurance, and disparities among citizen children are mostly driven by socioeconomic differences associated with restricted access to ESI, especially for children with two undocumented parents. I also learned that, contrary to my expectations, Medicaid participation rates did not vary by parental documentation status. AIM 2 provided an opportunity to examine whether these findings held true across states with disparate immigrant access to public coverage. In this case my findings aligned with my original hypothesis that indeed differential access to coverage for immigrant pregnant women and children moderated the effect of parental documentation status. In states with restricted access, the disparities by parental documentation status were greater and in states with more accessible policies, differences were virtually non-existent.

As with most qualitative work, many themes emerged during data collection that were outside of the scope of my question at hand (Creswell, 2007) and my task was to

delve into these data and learn how they inform, specifically, findings from AIMS 1 and 2. I have attempted to do so, while still being willing to discover new concepts that explain these findings. For theoretical and organizational consistency, I coded my "primary" data across the same themes I explored in my interview guide, but still allowed for additional themes to emerge. After having created all of my original codes, I also added "sub-categories" of codes that aligned with my ecological model (see Chapter 1, Background); findings reflect this framework.

I first present sample characteristics to provide a contextual background for my findings. I also include "profiles" of parents and key informants and our interviews (in Appendix K) in order for the reader to better understand the narrative behind participants' quotes and my interpretation of their experiences. Barriers and facilitators to children's insurance – both for U.S.-citizen and undocumented immigrant children – are then discussed, along with parents' perspectives on the value of this insurance. I follow with children's health care, an area that allows me to examine my principal question of parental documentation status and access, but to take it one step further then what I was able to accomplish with my quantitative work. Here again, I describe barriers and facilitators, intermixed with a discussion of delayed and foregone care when barriers have proved too powerful to overcome. I discuss the theme of immigration throughout this chapter, at times dedicating space to particular issues that fell outside the direct realm of children's insurance and health care, but are important for a better understanding of the relationship between parental documentation status and access. I close by highlighting the interaction between structural and policy-level forces and the community/local level.

Demographics and Insurance Coverage: Parents and Children

As seen in Table 5.1, I interviewed 14 Latino immigrant parents (11 mothers, 3 fathers). All fathers and all but four mothers were married or in a legal union. I begin by reporting sample characteristics for the 14 interviewees, but overall I learned about the experiences of 14 mothers and 10 fathers. On average, families had 2.8 children (range 1-4) for a total of 39 children; most families (9) had 3 children.

Documentation status and country of origin

At the initiation of each interview, I asked parents about their experiences migrating to the U.S. During this time, parents either disclosed their status without my prompting or responded to direct questions about whether they were legal permanent residents when they entered the U.S. and whether they had adjusted their status and/or naturalized. Eight of the eleven mother participants were undocumented, one (Teresa, I use pseudonyms throughout) was in the process of adjusting her status to legal permanent residency (e.g., “provisional” status), and two (Gissel and Nancy) were naturalized citizens. Of the three fathers, one (Roberto) was undocumented, one (Javier) was adjusting his status, and one (Francisco) had been granted temporary protection status (TPS) when he first entered the U.S. but had since lost that protection (e.g., “quasi-legal”). In almost all 2-parent families, the other parent held the same status as their partner, except Francisco’s spouse – she was a legal permanent resident (LPR). All parents with provisional status had only just recently – within the last year – adjusted from undocumented status.

All but one parent (Alma) who were currently undocumented, and both parents with provisional status (Teresa and Javier) had entered the U.S. without authorization. Some shared rich details about '"crossing the border," while others simply stated that they entered without documents without elaborating. Alma had initially entered the U.S. on a tourist visa, but the visa had expired without her adjusting her status. Both Gissel and Nancy had entered the U.S. as LPRs and then gained naturalized citizenship; Nancy had gained naturalization as a minor under her parents.

As I discussed in Chapter 1 (Background) and as demonstrated by the fluid statuses in which some of the parents I interviewed found themselves, immigration and documentation status do not fit neatly into clear-cut categories. These nuances are rarely apparent or discernable in quantitative survey data, demonstrating another strength of a qualitative primary data collection approach. I will elaborate as I cover the theme of "Immigration" throughout this chapter, but it is worth noting that Teresa's and Javier's families – who were currently adjusting their status – and Francisco – who had initially had TPS – face a complex of web of legality and eligibility that is neither static nor predictable. Their experiences offered a unique perspective into the relationship between documentation status and access to coverage and health care because they had lived and accessed services both while lacking documentation status and eligibility and while possessing legal work permits and eligibility for public programs.

To clarify, Teresa and Javier were at different stages under what is referred to as provisional status. Teresa and her family were no longer "deportable" (meaning they could be not be deported), but they had not yet received work permits nor were eligible

for public programs (including their two children who were also adjusting). Javier and his spouse, while still not legal permanent residents, were further along in the process and thus were able to work legally and were eligible for state-funded public programs such as MNcare (all three children in this family were US-born). Finally, Francisco, the father who once had TPS, was currently neither able to work legally nor eligible for public programs, but because he had initially been granted TPS he was not deportable either, an important distinction from undocumented parents in the sample.

All but one parent had been in the U.S. for more than 10 years and over half (8) were from Mexico.[31] The other six were born in Ecuador (4), El Salvador (1), and Guatemala (1). Many had first lived in other states (New York, California, Wisconsin) before coming to Minnesota (MN), but MN had been their home for longer than any other state.

Most parents (11) had only U.S.-born children, but Margarita and Roberto, both undocumented, and Teresa (provisional status) had children born abroad and children born in the U.S. No families had only children born abroad. Of the two undocumented families with children born in the U.S. and abroad (Margarita and Roberto), the eldest child was born abroad and the two youngest were both born in the U.S. Although I did not inquire directly about children's documentation status, parents disclosed this without prompting. Of the two non-US-born children with undocumented parents, Roberto's daughter had DACA (*Deferred Action for Childhood Arrival*)[32] and Margarita's son was

[31] Country of birth data not shown in Table 5.1 in order to protect participant anonymity.
[32] DACA, an executive action implemented in 2012, provides renewable temporary permission to remain in the United States (e.g., protection from deportation) as well as work authorization to youth under the age 15-30 who came to the

undocumented. Finally, Teresa's two children who had been born abroad had the same provisional status as their parents.

Parental employment

In every family, at least one parent was employed. Of the ten 2-parent families, five had only one parent employed; all of these six families were families where both parents were undocumented. Of the four 2-parent families with both parents working, only two were families where both parents were undocumented (Roberto and Leticia). The other three were Teresa's and Javier's families where both parents had provisional status (but only Javier and his spouse had permission to work) and Francisco (with previous TPS but no current legal work permit) and his spouse who was a legal permanent resident (LPR). Type of employment varied greatly across families. Most undocumented parents were employed in the food service industry (3) or in a factory (4). The remaining two were employed in janitorial, informal, or temporary work. Those with provisional status were employed at temporary agencies, at a small business, and in food service/food production. Finally, both naturalized citizen mothers (Gissel and Nancy) were employed in the financial service industry. Access to ESI was more prevalent for certain industries/types of employment and by documentation status, as I discuss under that specific theme.

United States before age 16 and meet other requirements related to length of time in the United States, education/military service, and criminal record. Importantly, although it provides protection from deportation and work permits, it is neither considered a "lawful" status, nor is it a pathway to lawful status (USCIS, 2014).

Health insurance coverage

Nearly all parents were uninsured – except for Javier and his spouse who were able to enroll in state-funded, premium-based public coverage (*MNCare*) after finalizing their provisional status, and Gissel and Nancy who had employer-sponsored insurance (ESI). Francisco's spouse, who was an LPR, had *Medical Assistance* (MA, Minnesota's Medicaid program). Most uninsured parents (9) had access to preventive and some specialty care through a large accountable care organization (ACO) "discount" plan that provides several levels of discounted care based on income. In addition, three currently uninsured parents had held ESI at some point in time (not shown). All but one mother, Gissel, had held MA during their pregnancies. This covers prenatal care, childbirth/labor, and three months of postpartum care under an optional federal Children's Health Insurance Program (CHIP) match (see Chapters 1 and 2 and below for details).

All but four U.S.-born citizen children were currently covered under MA (four had ESI). Javier's three children were at risk of losing their MA coverage as both parents were working and were earning too much; they were exploring other options – *MNCare* and ESI – at the time of the interview. Some children with MA had experienced short lapses in coverage due to disenrollment from delays in renewing coverage, but for the most part all citizen children had been covered since birth. Gissel's son, who currently had ESI, had been uninsured for the first three years of his life because he did not qualify for Medicaid/CHIP nor did his mother have access to ESI at her part-time job. Two citizen children, Roberto's son and daughter, who currently had MA had been covered by ESI in the past. Both Roberto's eldest daughter – who had DACA – and Margarita's

eldest son – who was undocumented – were uninsured but had limited access to care through the same ACO "discount" plan as their parents, as did Teresa's two older children, who were born abroad but now had provisional status.

Key Community Informants

I also interviewed six key community informants through whom I learned about the experiences of parents indirectly but broadly. All key informants were bilingual Latino immigrants themselves, except for one of the youngest key informants, Azucena,[33] who was born in the U.S. to immigrant parents. I interviewed two community health workers, one from a large ACO and another from a small faith-based safety net program who also provided services within a government agency. The first, Mayra, was intimately familiar with the difficulties faced by parents and children in accessing and affording specialty care; the second, Grecia, had expansive knowledge about access issues in rural areas and the needs of the immigrant community at large. In addition, I interviewed program staff from a Latino-led social service agency and clinic staff from a smaller clinic within a large ACO. The former, Azucena, had many years of experience helping families access public insurance and other public programs; the latter, Sofia, provided much insight into patient-provider communication and access to care. The fifth key informant worked in a large firm that recruited workers for temporary positions in outside companies; I interviewed Juan Carlos in response to my motivation to learn more about ESI and other employer benefits, as well as the overall economic situation of immigrant workers, to which this informant was able to speak definitively. Finally, I interviewed a

[33] I also use pseudonyms when referring to key community informant participants.

MNsure navigator, Patricia, who had worked with immigrant families for nearly a decade within a large safety net program that also helps families apply for public coverage programs. She was deeply knowledgeable about the barriers and facilitators to enrolling children in public programs.

Themes

Findings are presented by themes. In the spirit of the quasi-inductive nature of my dissertation overall and AIM 3, specifically, themes were identified both prior to interviews – the interview guide was organized into themes informed by quantitative findings – and through the direction of the interview content, following the lead of parents and key informants. As discussed in Chapter 2 (Methods), while my comprehensive analysis resulted in six total themes, here I only present findings that help address my question at hand: What is the relationship between parental documentation status and access? In particular, in line with my sequential explanatory design, I focus on findings that help explain my quantitative results. In that vein, three themes were identified in my primary codebook (see Appendix F): Children's Insurance,[34] Access to ESI, and Children's Health Care, in addition to a fourth, overarching theme: Immigration. Increased attention to access to ESI in my interview guide was a direct result of findings in AIM 1. I present each of the first three themes and their corresponding categories,

[34]I initially had coded MA Enrollment & Renewal as a theme separate of Children's Insurance, however, it turned out that every barrier I had coded as barriers to Children's Insurance in general were actually directly related to MA Enrollment & Renewal, and the only facilitator listed for Children's Insurance was also related to MA Enrollment & Renewal. Feelings around having children insured were expressed mostly by those parents whose children had MA (by nature of the distribution of coverage in the sample) and any gaps in coverage were directly related to MA renewal/disenrollment issues.

supplemented with thick descriptions from interviews. Within each theme I discuss the prevalence of findings across different families by documentation status and children's insurance. Findings from the Immigration theme are weaved throughout, in recognition of the primary motivation of this research, and the nature of that experience pervading many others for these families. Of note, within my secondary codebook – which includes intriguing findings that were outside of the scope of this aim but that I plan to disseminate in future work – the major themes identified were Parents' Health Care and Interpreters, as well as a category related to children's quality of care.

I indicate when I am discussing barriers and facilitators faced by parents about which I had learned only through key informants, in contrast to experiences shared directly from parent participants (or from both types of interviews). I also contrast certain barriers that key community informants perceive or have observed with parent participants' reported experiences, which for several themes were contradictory. This is not to say that data in either case are incorrect or not real, but simply to give the reader full information in understanding the source of these data points.

Children's Insurance

In line with the primary aims of the quantitative component of my study and to set the stage for subsequent themes, I first present findings related to Children's Insurance. Within this theme, I discuss barriers and facilitators to securing coverage and parents' feelings about the value and importance of children's insurance, as well as the worry and fear related to uninsurance. I mostly discuss the experiences of U.S.-born citizen children – as all children born abroad were uninsured due to above all else ineligibility for public

programs– although when appropriate and enlightening I contrast the experiences of mixed-status siblings. Importantly, I dedicate much of my discussion in children's health care to undocumented children, as they experienced the greatest barriers due to lack of access to insurance. In keeping with my ecological model of access, barrier and facilitator codes were categorized at the system- and community- or local-level (none of the individual-level barriers and facilitators I identified were relevant to my question at hand), and are presented within this framework. Because most children in the sample had *Medical Assistance*, the first part of this section is related to that enrollment/renewal process. I then review access to ESI, discussing ESI offers across parental employment and documentation status, affordability, and parents' experiences with ESI with special attention to unique barriers faced by undocumented immigrants within a labor economy where they are "unofficially welcomed and officially unwelcomed" (McGuires & George, 2003, p. 1167).

Access to public coverage: Barriers and facilitators

Parents and key informants named and at times discussed in detail significant barriers to enrolling their citizen children in public coverage. All U.S.-born citizen children were covered by MA, which in part implies that these barriers were ultimately overcome. However, some barriers – especially as related to parental documentation status – may still present some risk even after families have applied and been approved for children's coverage. Before discussing these barriers (both as reported directly and as I observed implicitly), I must note that many parents explicitly stated they had faced no barriers to enrolling their children in health insurance coverage. For example, Beatriz, an

undocumented mother, expressed that she hasn't faced any problems securing coverage for her three (U.S.-born) children, a sentiment she came back to several times during the interview:

> **Jessie:** *Well ok, so to start, have you tried to obtain health insurance for your children?*
> **Beatriz**: *My children have always had health insurance, I've never had a problem with this…*
> **Jessie**: *Ok. So what has been your experience applying for insurance for them?*
> **Beatriz**: *Mmm well I would say good, because I've never had a problem.*
> **Jessie**: OK.
> **Beatriz:** *I have heard of people that said they have had problems, but I haven't had problems.*[35]

Similarly, key informants identified potential barriers their clients could face enrolling citizen children but emphasized that for the most part these did not impede enrollment. Grecia, a community health worker from a faith-based safety net program shares:

> *What I've seen is that for those born in the US, the immigrant parents don't have too much of a problem looking for it because when the children are born they leave the hospital with insurance and then that insurance is renewable.*

Most barriers to MA reported by parents explicitly were not related to their own lack of or precarious documentation status. In fact, even when I asked explicitly – after speaking generally about access to coverage and care – over half of parents did not perceive this as a major barrier. For example, when I asked Francisco, the father with quasi-legal status (who had once had TPS), whether and/or how his immigration status has influenced the process of seeking health insurance for his daughters, he emphatically stated:

> *No, no, no, not at all!*

[35] Quotes in *italics* are translated from Spanish.

Of course, given his status, Francisco did not face the same fears of detection and/or deportation that undocumented parents might confront, but even the mothers and fathers without status concurred. Beatriz, who related no problems in general with enrolling, did not experience any problems related to documentation status, either:

> *No, no in the application that we fill out for medical insurance for the children they always ask…they always ask the question [about parent's status] but always, like we just put "no" and there aren't any problems*" **(ID 2)**.

Beatriz and other parents did identify documentation status as an ever-increasing barrier or challenge in other aspects of her life, but not as related to their children's coverage. Beatriz was quick to mention that her and her spouse's documentation status were not a barrier even though they were asked about this when enrolling for their children; this was a common theme across interviews.

Parents often explained their understanding that these benefits were for their children and thus parents' status was not taken into consideration. This appeared to be the case even when they had first encountered the system. For parents who stated that they had faced no barriers related to their status in enrolling children, I explored whether they had *ever* felt their status would be a barrier, but it seems that most had understood from the beginning that their children were eligible for coverage despite the parents' status, as Josefina, an another undocumented mother with two U.S.-born children relates:

> **Jessie**: *So, from the beginning did you believe that your immigration status would affect your ability to obtain health insurance for you and your kids?*
> **Josefina:** *Well for me maybe yes because it's difficult but here for the children I didn't think so because they were born here and already have a beginning with their records, for them I didn't think that it would be difficult because they were born here.*

Indeed, most parents demonstrated high familiarity with eligibility for and rights to coverage for U.S.-born children, specifically identifying these rights without my prompting. As I discuss in more detail below, parents emphasized children's own (lack of) status as a barrier, as opposed to parental documentation status. When I asked Margarita, an undocumented mother with both US-born and undocumented children, how her own status affected their access, she repeatedly focused on her children's status, not her own, contrasting citizen children's rights with a lack of rights for undocumented children:

> **Jessie**: *Has your immigration status affected in any way your experiences looking for services for your children?*
> **Margarita**: *For the children that are born here, no; but the oldest child yes for being illegal. He doesn't have insurance. He does not have rights…*
> **Jessie**: *And… Did you ever think that your immigration status as a mother would affect your children's health insurance?*
> **Margarita**: *No, I have never thought that.*
> **Jessie**: *Whenever you have gone they have explained that…*
> **Margarita**: *Yes, only those who are born here have rights to…*

Returning to a discussion of the significance of parental documentation status, even though workers at counties, community agencies, or clinics may ask parents whether they are documented or possess a social security number, it seems staff are careful to highlight for whom the benefits one is seeking are for. In fact, Azucena, a community health worker from a large Latino-led social service agency, described how she emphasizes to parents that they must state: "*I don't want to apply for myself, just for my children*" when applying for MA, and parents understood this distinction. Margarita, with both citizen and undocumented children, articulates navigation of this distinction.

> **Jessie**: *And…at any time in the clinics or at the county...Have they asked you about your status as a mother?*
> **Margarita**: *Directly, no; but when I am filling out documents they ask me if I am legal or not, and for whom am I asking for help. They fill out whom I am asking for help, if they are legal and who qualifies or not.*

It should be mentioned that not all parents reported having been asked about their status when applying for their children. Teresa, the mother with provisional status who was adjusting from undocumented status, specified that she has never "*suffered*" when looking for insurance for her U.S.-born child because staff do not inquire about her immigration status when she is applying for him.

System-level barriers and facilitators

Despite the fact that all citizen children in the sample were insured, parents and key informants did describe barriers to MA enrollment and/or renewal. While no parents described currently feeling that their documentation status was a barrier to their children's coverage, just under half of undocumented parents shared with me that they had felt that at some time. In addition, over half of the key informants did perceive that parental documentation status was indeed a barrier for some families, at least when they are first seeking coverage for their children. Key informants also described the required income verification under MA as a potential barrier for undocumented parents, especially if they are paid "under the table" in cash. There were also newer barriers parents mentioned related to applying/renewing in the post-ACA (or "Obamacare" in their words) environment. For undocumented children, barriers to health insurance were nearly entirely rooted in public policy on access to coverage. Because undocumented children in MN haven't been eligible for MA since 2003, there are simply no opportunities outside

of ESI for them to obtain coverage. Two key facilitators for citizen children's coverage – as they seem to help explain why so few parents perceived their own (lack of) documentation status as a barrier – are access to prenatal MA, regardless of immigration status and, subsequently the "automatic" MA enrollment of newborns.

System-level barriers. Even though parents in the sample did not perceive parental documentation status as a major barrier, if at all, key informants reported having encountered throughout the years many families for whom this was indeed a barrier. Families are fearful of applying or perhaps do not apply because they just assume that their children will not be eligible due to their documentation status as parents:

> **Jessie**: *Do you think they think that their own immigration status, like if they don't have papers, do they think that this will affect the child although it was born here?*
> **Patricia**: *Yes, sometimes. Sometimes yes, they think that they are not eligible at all because they don't have a status. They make their limits and a lot of times don't ask. They can apply for their children even though they can't apply themselves. Yes. Many people, unfortunately, there is a lot of ignorance still, in spite of there being more people to help and more agencies that help orient them and all that, thank God. There are still families that don't know, that are afraid. Sometimes. To ask for help because they don't have an immigration status.*

Roberto, an undocumented father with both US-born and undocumented children, described having felt this way in the not so distant past. He explained that he and his wife initially thought that 1) their US-born children would be not be eligible due to their (the parents') documentation status, and furthermore, 2) that sharing information with the government would also have consequences for them (the parents):

> *Before getting to know the system, yes, we…we thought that, that our status was going to affect us, affect them just as much as us. We thought that they weren't going to be eligible and we thought that it was going to affect us because everything enters into the government's database. So, well..we were in the*

> *shadows, we're still in the shadows but now with more knowledge…of what we can do…and what we can't do.*

Notably, Roberto depicts he and his wife as "en la sombra" ("*in the shadows*") because of this lack of information, but also emphasizes that they are still "*in the shadows*" but now know what they can and can't do as undocumented parents. I draw attention to this point because it's an informative illustration of much of undocumented immigrants' experiences. The "out of shadows" piece of course is a common expression, but his focus on learning what they can and can't do is important for understanding a system that simultaneously recognizes and does not recognize undocumented immigrants.

One specific barrier within the enrollment process that presents unique challenges for undocumented immigrants, and relates to what parents "can and can't do" is that of income verification. While the amount of paperwork was a common theme across parents of various documentation statuses, key informants discussed the anxieties felt by undocumented parents, specifically, when they are first asked for this information:

> **Grecia**: *A very common thing that happens is that at the moment that parents apply for a medical service or for medical insurance for their children, they are asked for proof of income and that is when the problems begin. Because they say 'I receive payment in cash, I am not paid with a check or something like that, so how can I show proof of that?' and I tell them 'Prove it in any way that you can, with a letter' and then they say 'but then will they ask me for my social security? And what name should I give?'*

Almost all citizen children were covered by MA, so it appears that most parents are able to provide proof of income. Still, this barrier is important to highlight because it demonstrates the risk parents are taking in covering their children – potentially exposing their status to both the government and their employer. Thus, the fact that all children in this sample were insured does not imply that parents have not faced or will not face any

challenges in accessing this coverage. It also demonstrates the role of staff at community agencies and clinics in mitigating these barriers, as I discuss further in the following section.

The fact that most parents did not perceive parental documentation status to act as a major barrier to children's insurance did not necessarily mean this was not identified as a barrier to participation in other public programs. Grecia discussed some parents feeling wary of taking up other benefits – even though these benefits would also be dependent on children's eligibility and not parents' – because of the greater amount of information required and fears that participation could lead to deportation:

> O*ne case that happened to me that wasn't for medical insurance…The three children were born here, they were American citizens and the father was undocumented, but his children qualified for food stamps and for the SNAP program…I tried to convince the father to apply on behalf of the children so that the children would have it…The father was in critical condition, economically speaking, he didn't have much money and they were going through a tough time and had real need. And I tried to convince the father and he asked me 'what do I have to do' and I told him 'you have to put your personal information there too.' And he asked 'it isn't just the children's?' and I said 'no.' And he said 'well if it is my information I can't give any of it' and he didn't want to apply. Because they feel that they'll be deported, that the information will be shared and that through that they'll be found out and that is what scares them.*

Another parent, Irma, had the same concerns about the amount and nature of personal information required to received these benefits – compared to that requested for insurance, but her concerns were more related to "public charge" (Park, 2011) and fear that receiving these benefits could affect one's eligibility for citizenship or somehow how affect her son in the future:

> *When I went to apply for my son, my family always told me that insurance is good, and it provides for medical things or in an emergency to take the kids. But for example if you use it for rent or clothes, later that will affect you, because it's*

from the government, they've always told me this. So I went to where they were helping me to apply for the insurance, I focused on this, saying that if this wasn't going to affect anything with immigration, or if my son wouldn't have problems one day and they always told me no. But if I go for the program, welfare I think it is, with time yes, but until then they tell me and don't give me more explanations because I'm not interested in it. And I haven't asked for more information and so I am avoiding asking whether it will affect me or not.

Irma felt torn between what she was hearing from those assisting her with the applications – and feeling like she was not getting enough reassurance that it would not affect her, and her family, who has been in the country for much longer than her.

And my in-laws have lived here for years, the siblings of my husband. So they are telling me to not go for the prepaid cards for food because that's where you will enter into problems with the government because it all is from the government. So as my husband says, we came to work and we are working here, and with what we work we can survive on, and thank God for this state, only this state gives clothes and it is a big help because sometimes they give us vegetables, and when you have to apply or they ask for ID, I don't get into giving my information. It's only when I go and they just give me…vegetables.

It is not clear whether other families accessed these benefits and/or whether they faced these same barriers, as this was not an explicit area we covered in the interviews. However, key informants did describe that one of their roles is counteracting misinformation, as Azucena shares:

you have to explain in a way that they feel comfortable with, because later they say, "I heard this," or "I heard that," so that's where they get swayed by comments from other people as well.

Although I did not intentionally set out to explore enrollment within the post-ACA environment, the timing of the interviews (fall 2014 and winter 2014/2015) fell right after the first open enrollment period for MNsure and other federal/state health insurance marketplaces. The ACA (or "Obamacare") presented much confusion for families, and parents who did apply for or renew coverage through MNsure directly (as

opposed to through the county as before) experienced long delays and requests for much more information than before. In fact, the only parent who expressed recent concern or confusion about whether parental documentation status would affect children's access to coverage was Roberto, who hadn't had to apply for MA for his children until after the 2014 Medicaid implementation. Because he was fired from his job and subsequently lost his ESI family plan – due to a workplace injury that eventually led to his employer discovering his (lack of) status – he needed to apply for MA for his children in late 2013/early 2014. Therefore, instead of applying through the county like so many other families, they had to go through MNsure and experienced much confusion and many difficulties and delays along the way:

> **Roberto**: *They are left without insurance so while we were navigating Obamacare and whether our children would qualify as children of immigrants…um…they were without insurance, they were unprotected. Not completely because we could pay when they were sick with the flu or an infection, well we could pay…Later we realized that they could apply, children born in the U.S. could enter into the system…*
> **Jessie**: *So before Obamacare your children didn't have [insurance] through the state, this was the first time that?...*
> **Roberto**: *Yes, this is the first time, um, and from there they took a really time to approve them. First because the social workers were not well informed, the workers that did the insurance paperwork were not informed and they made errors.*

Interestingly, this father was quite informed of the ACA and had done a lot of research on his own and attended many community forums with respect to the impact of the ACA on the immigrant community, but he still felt much uncertainty at first as to whether his children would qualify given his status. Even after this question was resolved, his children were without insurance for several months as they submitted their application and waited for a response, adding even more anxiety and uncertainty to the process.

Patricia, the key informant who is a certified MNsure navigator herself, explained the unique barriers for undocumented families applying for their children's MA through MNsure:

> *Our system doesn't function as it should. One of the things that is very frustrating for us is that we can't create a username and password to do the application in the computer system…it doesn't ask us directly for a Social Security number but they check your record and if you don't have a valid SSN, then you don't have a record with the government and you can't create a username or password. The majority of the time…we lose time…we end up doing it on paper. That takes more time and should have been immediate on the computer…we don't know with the income they show us whether they are eligible for medical assistance…One can ask to be sent a username and password so that you can do it yourself but sometimes that takes a week or two to get the reply to the clients. The majority of our families are low-income families that sometimes ask for permission to leave work to come and…aren't going to ask for another day to be released, and lose another day of income to come here. So we end up doing it through paper. We give them the option of whether they would like to send the paper to get the username and password so that they will be able to fill out their forms on the computer, but the majority of the families say no, or it's women that come in with their small children and they took the bus, it's more difficult for them so we just do it using the paper forms.*

Although parents did not express major barriers to enrolling their children in MA within the tradition county-based system in MN, the uncertainty and confusion Roberto faced combined with the challenges Patricia articulates suggest that in the future these new ACA-related requirements could very possibly lead to delays in enrollment or an inability to enroll children at all.

Finally, due to their exclusion from Minnesota's public coverage programs, undocumented children faced the greatest system-level barriers. In fact, the term "barriers" is not technically correct because it really boils down to this single, overarching coverage barrier. Undocumented children were covered in Minnesota under the state-funded General Assistance Medical Care (GAMC) from 1997 to 2003, but since

then have remained ineligible. While undocumented children in the sample did have access to health care services through safety net discount plans, these only cover limited preventive services and thus these children are considered to be uninsured. In addition, as Mayra – a CHW from a large safety net ACO – describes, reduced eligibility guidelines for Emergency Medical Assistance have closed the only potential pathway to coverage for undocumented children, even if it had only covered children for a limited time and for limited conditions:

> *Before…if you had certain condition you were able to apply for emergency medical assistance…getting the doctor to write a letter or a note so we could have the financial counselor send it and them getting the emergency medical assistance and then scheduling them. But now, since they have also put restrictions on emergency medical assistance, you literally have to being dying in order to get it, there's no way, there's no way. And I know that many of our youth were getting coverage for mental health, like for depression, for everything. With the emergency medical assistance. But now our teens can be literally suicidal and they're not gonna get anything. I know that now, in order for them to get any kind of emergency medical assistance, I believe they have to be admitted for at least two days. In order to even qualify. And it's really difficult. It's difficult to see access for a lot of patients, especially if they have a condition that is more mental health and behavioral health related that is not something that is going to kill them immediately...It's been very difficult, very frustrating. And when you're there, you know, you know that they need it, I mean you can't deny care to a child.* {English original language}

Because – as Mayra articulates – undocumented children "literally have to be dying in order to get" public coverage in MN, I focus instead on the consequences of this policy, describing barriers to and facilitators of *care* under the theme of Children's Health Care. However, before moving on I should note that, although there was only a single child with DACA in the sample, MN is one of five states (+ DC) that have extended public coverage eligibility to youth with DACA, as they are not eligible under the ACA (National Council of State Legislatures, 2015). Although it appears that she, Roberto's

daughter, should have been eligible at the time of the interview (August 2014), she was uninsured and Roberto relayed great frustration and confusion in trying to determine whether she was indeed eligible.

System-level facilitators.

> *They ask if you are legal or not, but they say that it is not important whether you are legal or not. By law, for a pregnancy they give you insurance*. -- Margarita

In contrast to policies governing undocumented children's lack of access to coverage, two key system-level facilitators ensure coverage for undocumented pregnant women and citizen children. First, MA coverage for prenatal care and childbirth is made available to income-eligible women, regardless of immigration status. Second, children born to mothers who are covered by MA during the month of the birth are automatically enrolled in MA themselves until their first birthday (MN Department of Human Services (DHS)). Every undocumented mother in the study, as well as the spouses of father participants, had been covered under MA during pregnancy and therefore their children would have been automatically in the system at birth. Because these mothers were able to apply for and obtain MA early on in their pregnancies, it appears that they would have encountered any confusion or fears related to their documentation status before their children were even born, and parents confirmed this. In fact, they explained that although they thought they were not eligible at first, they were eventually connected to application assistance where, as Margarita described above, they learn about their eligibility for and right to prenatal coverage, regardless of their documentation status. As Eliana shares:

Well I thought that they weren't going to give me insurance, because I wasn't from here, I thought that I wasn't going to have any service, so that's why I didn't go. Uh huh, because I said 'no, no, they can't treat me here.'

She continues:

At first I didn't want to go because I didn't know, I didn't understand, I didn't know if I qualified or not for that…not until someone told me.

If families are already connected to the system during pregnancy, their children are more likely to also be connected, especially given that MA enrollment is automatic at birth. By automatically extending this coverage to the newborn, the parents are given a clear and strong message early on that their own documentation status does not affect their children's coverage:

Jessie: *did you think, for example, when you were to apply for health insurance, did you think that your status would become an issue, that would affect if your child could be eligible or not for health assistance?*
Alma: *No. Just because before any decision you make, they always send… for example, when I had my first child here, a long time ago, a social worker comes, and a financial worker comes; or the social worker explains it… where do one needs to go…just after the birth, the woman applied right there for the child's health insurance. Before you left the hospital.*

The fact that parents leave the hospital knowing that their children are covered may help explain why so many of these same parents had explicitly stated that their own documentation status did not affect their children's enrollment – even when they were asked about this while completing applications. In fact, many undocumented parents always processed their MA renewal at county government offices as opposed to community agencies. In Minnesota, at least at the policy level, it is made very clear that parents do not need to provide "proof of immigration status" when applying for their children. For example, the following language is posted on the MN DHS website under a section titled "Noncitizens:"

What do you need to know about my immigration status?
We may need proof of your immigration status. We will try to help if you need help getting proof. You do not have to give us proof of your status if you are:

- Applying for coverage for emergency medical care only
- Pregnant
- **Applying for your children or other family members but not yourself (we may need proof of status for children or others applying)**
- Only helping someone else apply.

Will you report me to U.S. Immigration and Customs Enforcement if I am here without documentation?
No. We only use your information to see if you can get coverage.

Parents themselves are not likely going to this website and viewing this information, but it does indeed demonstrate the tone/environment in Minnesota and the tone likely reflected by workers, as well.

Community-level barriers and facilitators

While parents did identify barriers at the community level, none of these were related to or helped understand the relationship between parental documentation status and access to coverage and care. Thus, here, in a natural progression from the previous section I primarily focus on the importance of having access to community agencies or clinic when parents are first applying and are not familiar with the system. This was important even for those parents who eventually started going to county offices instead; many of them were only comfortable and able to go directly to the county after having learned of their and their children's eligibility in the community setting. Friends and family were also essential to this process, as parents often ended up at community agencies and clinics due to "word of mouth."

Community health workers (CHWs) and other staff at community agencies and clinics view as one of their major roles the countering of fear and/or misinformation parents can face when initially applying for coverage for themselves (during pregnancy) or for their children. Key informants described how they walk parents through this process and attempt to ease any fear or hesitation:

> **Jessie:** *And have you come across a family that doesn't apply because they are afraid or are you able, are you always able to explain to them?*
> **Patricia:** *I like to always guide them and tell them that this is going to happen, for example for the children this is a right that corresponds to them, these are the benefits for your family, it won't affect you at all. It's more than anything instructing, educating our families. So that they know it won't affect their status, that it is a right, that their children can be eligible without any necessity of fear. It's more than anything education that we can give to our families. Same with follow up. For example, many times if people don't know what steps they have to take after filling out a form, they stop there and receive their papers and don't understand them and don't know what to do. So they stop there and after that don't ask for help because they think they'll be denied, they won't know why, but they'll be denied for something.*

Patricia's perspective provided further insight into why parents did not currently identify their status as a barrier, precisely because they had encountered staff from the beginning who immediately made clear what was needed to apply and thus what could have been a barrier never materialized. In fact, many parents were explicit about this, both when first applying when pregnant and in renewing children's coverage, as iterated above. In addition, even parents who go directly to the county to renew coverage described first going to community agencies and then only going to county offices after feeling more confident. Alma, who now preferred to go directly to the county, was only able to after learning about the process at a community agency/clinic:

> *So, with the oldest one, I applied via the clinic. Then, with the other two, it was easier for me.*

CHWs and other staff emphasized how they always communicate to parents the importance of sharing this information with their family and friends. This seems to resonate with parents; many of them described either having received help from friends and family, or referring their friends and family to agencies they trust. Josefina highlighted the salience of family in helping her identify agencies where she could get assistance:

> *In the beginning it was difficult for me because I didn't know how things moved along, and I have my sister who already has older children and I asked her and she told me "go here to this place and that place and here they will tell you what things you need so that they give your daughter an insurance card."*

Eliana, who described above that she didn't think she was eligible because she wasn't "from here" was eventually connected to a clinic because of a friend who not only referred her but actually accompanied her there:

> *So that person helped me, took me, because at the time I didn't understand English (laughs) and well- she knew a little bit, so she took me there to apply.*

Finally, parents also emphasized the importance of word of mouth when they encountered community agencies where they were happy with the services and, as a result, would enthusiastically refer their friends and family. Leticia shares that:

> *Well, when--after I've gotten help, I always say to my friends, "Go to apply at--," you know? And they attend to you with the insurance, they're good people.*

Access to employer-sponsored insurance (ESI)

As seen in Table 5.1, four families were currently offered ESI coverage through an employer, including the two families who had taken up this coverage. Another three families had never had access to ESI and three had had an offer in past employment – all parents had taken up this offer in past employment. Two families did not know whether their current jobs (for self or partner) offered ESI.

ESI offer

Access to ESI was certainly related to documentation status, and on a few occasions – even without probing – parents were explicit about this connection. Of the six families offered coverage, two of them were headed by naturalized citizen mothers and two were through jobs held by parents with provisional status and importantly, a work permit. Only two families with undocumented parents (of nine total) had access to ESI. Of the remaining seven undocumented families, two were not sure whether they were offered coverage, two had only been offered coverage in the past, and three were sure they were not offered.

Each of these latter three cases was illustrative. In the first, Margarita explicitly described that her husband was not offered health insurance at his work in a factory because:

they don't offer it to those who don't have documents.

When I asked her whether she knew if this coverage was offered to other employees, she responded:

> *No, I don't know; because he tells me that they work a lot… there are only Mexicans because an American can't do heavy work…Only Mexicans…They don't offer it to them.*

While she was not explicit here about whether all these workers were undocumented, she does explain that they do not offer coverage to those without "documents," and then explains that "there are only Mexicans working" there and ESI is not offered to anyone. This seems to imply that this employer knew the workers did not have permission to work, and importantly, it was very clear to this mother that this was the reason they were not offered health benefits. She went on to discuss and contrast with her husband's past work in construction where they did not offer it to anyone, even "Americans":

> *My husband also worked with an American who did not receive health insurance either.*

In a similar vignette, Josefina described how at her own places of work, now and in the past, there was a clear divide in who was offered benefits:

> **Jessie**: *Alright so for your work, you don't have to say the name of the company where you work, but what sort of work do you do?*
> **Josefina**: *I work at the [name omitted]…*
> **Jessie**: *And do they offer health insurance?*
> **Josefina**: *Yes, but for the people that have their papers.*
> **Jessie**: *Ok so they know and only offer to those that have papers, they give benefits to the employees that have papers?*
> **Josefina**: *Mmhmm.*
> **Jessie**: *And in other jobs that you've been at did they offer health insurance?*
> **Josefina**: *Yes but like I said, it's for the people who are well established in this country, one doesn't qualify for these things that they have, sometimes the way you win is just having a job.*

For Josefina, as with Margarita, their awareness of this connection between being undocumented and not being afforded benefits was readily apparent. Another notable

case was that of Eliana, who describes access to (and the need for) ESI at her children's father's job:

> *as far as I know, they don't have it [health insurance]… he works…painting. He even struggles a lot with that because well they don't give him insurance there- and I don't know who- but they ask him for insurance. Aha, as he works with the paints…because of that they said he had to have insurance.*

Here, the father was doubly vulnerable, as – due to the health risks associated with his line of work – he was required to have it despite not being offered coverage by his employer. However, it was not clear how or where the father obtained coverage, or how the employer enforced this requirement.

Key informants also spoke more generally about access to ESI for Latino immigrant families. Juan Carlos, a key informant who worked at a firm that coordinated temporary work for a number of corporations, described that most of the employees who are contracted for temporary work are never moved on to full-time work, restricting them from receiving benefits:

> Well I will say that with my experience last year…less than 10% got hired permanently because it also depends of the companies that have openings position or they only need a temporary force for some period of time during their busy time, so it also depends on how many openings the company has or how many people they are trying to bring on as a full-time employee. So we're talking about…10% get the benefit of, get hired full time and get the possible benefit of getting benefits through the companies. {English original language}

He added that being stuck in temporary work and not receiving benefits was especially the case for those employees who do not speak English; which, as I describe under the theme of children's health care, is a barrier that is much more prevalent among undocumented immigrant parents.

Take-up and affordability

Even in the case where families are offered ESI, this coverage is often out of reach. Of the six parents with access to ESI (an ESI offer), only the two naturalized citizen mothers, both in the financial service industry, had taken it up and perceived their monthly premiums as affordable:

> **Jessie**: Ok OK. And so is your health insurance through your employer, would you say it's affordable? I mean, how do the costs feel to you?
> **Nancy**: Um, it's affordable. Well this past year we our deductibles went up because of Obamacare and I think they had to make some adjustments I don't know. But it is not too expensive, my employer pays most of the cost of it, and I also have an HSA, health savings account to pay for my deductible and my out of pocket amounts. And also my employer gave us a lot of health activities that we can do throughout the year to earn an additional amount, depending on what activities. If we do six to twelve activities, healthy activities, we can anywhere from 100 to 300 per family per activity so that helps, it has helped me with the cost. {English original language}

On the other hand, the four parents with ESI offers who had not taken this coverage up – who were either undocumented or had provisional status – felt that premiums would eat up too large a portion of their paycheck, leaving little room for competing costs. Rosa related:

> *Yes, they offer it, but the problem is that they take a lot of money out of the check. We only have money for the rent, food and we don't have enough money to pay for the health insurance…it has its costs and scarcely covers what he earns.*

Rosa immediately brought up affordability on her own when I asked whether her husband's job (she was not working) offered coverage, as did Teresa, demonstrating the salience of the cost of ESI for them:

> *Yes, but it's pretty expensive…for him alone it's nothing more than, he has to pay like $70, but family is $400 or something...it wouldn't be enough, it wouldn't be enough, because he has to pay bills, he has to pay rent, all that with the house.*

Teresa also brought up the important fact that although coverage for her husband alone might affordable, they would have to pay about $400 in monthly premiums. Such a high premium is prohibitive for them as well because of all the other competing bills and rent. Leticia, who was offered ESI through her own job, brought up the fact that her employer does offer but does not help with the cost. She also does not feel that such a high premium is worth the benefits:

> *well the job does offer it to me but I myself would pay. And since they pay me so little, it would take out a large part of my check…And I don't use it--thank God, we don't get sick much more than the physical check up every year. And for that I say that I don't have a reason to be paying every 8 days out of my check, if I'm not using the insurance! But thank God we don't get sick more than the physical check-up*

Interestingly, all three parents who had only been offered ESI in the past had taken up this coverage. Francisco, the father who had originally entered under TPS, actually had mandatory coverage at his past employer but he had never used it. He explains:

> *I did not understand why they charged $20 for the check and health insurance. You could go the doctor but I never used it.*

As he mentions, even though the premium was being deducted from his paycheck, he still did not understand why that was, hinting at a common problem I heard about often from key informants. As I discuss below, many of them felt that, even in cases where coverage appeared affordable, parents were not given enough information about ESI to really understand the value of having these benefits.

Roberto's experience with past ESI coverage offered some insight into why parents might be hesitant to take up this coverage. He had had ESI for his whole family

for several years, but after a workplace injury slowly lost everything. First he describes how he was injured and the worry he immediately felt:

> *I went to lift a 35 block of wood…45 pounds maximum…and I slipped…and everything fell down on me…when it's coming down, 45 pounds of weight triples…when I tried to catch myself I ended up like a dancer with my legs wide open and twisted and…I felt that something snapped...an intense pain…very intense…I couldn't walk…somehow I got up after a long time…I needed to work because if they found out that I didn't have documents and I was working…they were going to fire me and they weren't going to give me medical help…*

He then goes on to describe how he kept working that evening but tried to file a report immediately:

> *I only had like 25 minutes left to work…after that…well I told the line operator…what had happened and he asked "that what was I heard" and I said yes, that was me…And I said I'm coming to tell you because I need to make sure you know…in order to file an accident report. Well, because there is no supervisor during this shift, only the line operator supervises then…so we had to wait until the next day to file a report. So the next day I came back and I told the supervisor and the supervisor sent me with his boss…they filed the report and they didn't believe me, they didn't believe me because they said I let too much time pass, but it was because there wasn't a supervisor then. Well, they filed the report and I went to a hospital that is close by…I went to the emergency and they attended to me and that was where everything started…my treatments at the hospital, injections, therapy, doctors, medicines, everything…until that is…the time came when they found out that I was not eligible [to work] and I was left without insurance, my family was left without insurance, they closed my case, I was left without work…fighting…fighting.*

Roberto had suffered this injury over three years before our interview and had only recently started working again due to his untreated back injury, which had left him unable to work. After all, he had lost the worker's compensation and ESI coverage that could pay for the necessary physical therapy and prescription drugs. Due to these limitations, restricting him from physical labor, even the work he was able to recently secure was through a temporary agency with no benefits. Also of great importance in this family's

story is the fact that his ESI had also covered his daughter (who currently has DACA but was undocumented at that time), so the family lost the only avenue to coverage that she had.

Finally, the ACA again came up, as it had in discussions of public coverage. Key informants, in particular, reported that parents had been coming to them for advice in the face of the employer mandate. As Grecia explained, undocumented parents were facing a dilemma, although they are not subject to the individual mandate, they are obviously not able to explain this to their employers without disclosing their status:

> *some people have come to see me because they've received a letter saying that they have to apply for health insurance because otherwise they'll be fined. And then I ask them, 'are you a citizen, are you a resident?' And they tell me 'no, neither' so then I say …is your employer providing health insurance?' and they tell me 'yes.'*

Most of these parents cannot afford the ESI they are offered, but they are not sure how to go about not taking up this coverage without their employer finding out their status:

> *they say 'my boss is giving it to me because I have a social security number that isn't mine and that's why he is getting a letter saying that I need to have health insurance. Otherwise he has to provide it for me and he is offering it to me but I can't pay for it because it is too expensive. What they would deduct from my earnings is too much and it isn't worth it to me- so what can I do?'…*
> *So then I tell them 'your employer doesn't know what is going on with your identity, right?' And they say 'no, he doesn't know but if I tell him he will obviously say goodbye to me' and then I tell him 'so let's do something, if you don't want to expose yourself too much then just respond to your employer and tell him that you're not going to take the insurance he is giving you and take the letter and say that you're going to take into account what the letter says and do what you can on your own.'*

Grecia also attempts to ensure parents that they do not need to have coverage, explaining that because they are not afforded the right to coverage, they are not obligated to have it, either:

> *And I tell him 'you won't be able to do anything, definitely, but if you get a fine you are not obligated to pay it, because you don't have the right to get health insurance, or to apply to it so then you also don't have the obligation to pay for a fine of something that you have no right to.*

It is not clear what the implications of such scenarios have been for parents, or whether employers subsequently check in with employees to ensure they have coverage, but it certainly adds a layer of worry and fear for parents who are already in a vulnerable place before their employers.

Willingness to take-up

So far, I have discussed ESI offers, take-up, and affordability, but many parents and key informants also elaborated on parents' willingness to take up coverage. First, they discussed the fact that many parents are given little to no information, or misinformation, about potential ESI benefits packages. Therefore, even if coverage might be affordable, parents are not given the opportunity to see the potential value for what they could get. As Juan Carlos asserts:

> from my perspective that I hear from them is that they are not well informed of the benefits of having health insurance. {English original language}

Second, as he also describes, parents do value coverage, and availability of ESI is a common question he hears from applicants when they first come in:

> It is important to them because most of our employees looking for work, they have families, and for them it is very important that they feel secure that their family has insurance if one of their kids or wife or child get sick and able to go to the hospital to get treatment and help them pay their bills, but yeah I mean that's a question that we get pretty much every time someone comes to the office to apply for a part time job. {English original language}

Therefore, although few parents (two) in the sample actually had ESI, it appears that parents would be willing in many circumstances to take up coverage if it were made available to them. Most parents did not or were not sure if they currently had an ESI offer and all parents who had had an ESI offer in the past had taken up this coverage. Beyond the lack of ESI offers, affordability, fear of disclosure of status, and misinformation regarding the benefits to having health insurance act as barriers to ESI even when it is offered.

Value and importance of insurance

Parents were quick to describe the value and importance of having health insurance for their children, as well as feelings of gratitude and security. In contrast, parents with uninsured undocumented children expressed worry and "feeling bad" due to a lack of insurance. Parents characterized these feelings as "good and secure," "calm," not worrying "so much," and "thankful" ("*Thank God the two of them have insurance*," Rosa), mostly related to knowing that even if their children get sick they can bring them to a clinic/hospital at any time and they will receive treatment. They also stressed that they certainly would not be able to take them to the doctor if they did not have insurance, often because of competing costs and little income for rent and food. Rosa emphasized the primacy of children's coverage above all else:

The most important [thing] is health insurance.

In a world where parents earn very little and have very few resources, health insurance is an important tool; Josefina articulated the tremendous value of insurance for access and accessing quality treatment:

Although I don't pay them with my money, they have their insurance card.

Having insurance for their children allows them to access a system that they would never be able to access on their own, and this was very apparent to them.

In very stark contrast, worry and "feeling bad" and "scared" permeated the narratives of parents with undocumented children. As I described in the sample characteristics, all families with children born abroad also had U.S.-born children and so parents – as well as children themselves – were acutely aware of the differences in access among these siblings. One mother with two U.S.-born children and one undocumented child expressed in several different ways this contrast. Understandably, when we first discussed documentation status although I was referring to her own documentation status as a parent she focused on her child's lack of documentation status as the greatest barrier. As I presented earlier, she responded to my question by stating that she did not think documentation status affected the children who were born in the U.S., but certainly affected the oldest child because he was "illegal" and thus didn't have insurance and "does not have rights" (Margarita). She shared that she found access to both insurance and health services when sick to be "easy" for her younger U.S.-born children that had insurance, but felt "bad" and "scared" that her eldest "could get sick." She also elaborated on feeling worried for her eldest, but not youngest children when they get sick:

> *Good, I do not worry so much [knowing that the youngest children health insurance]; because I know that the health insurance expires and I can renew it, but I am worried for my oldest child when he gets ill because he does not have health insurance. The youngest children's situation is easier if their insurance expires, I can renew it.*

This mother's worry was rooted in the fact that they had already experienced significant medical bills – and years later were still paying off – for past hospitalizations and ED visits for her eldest child. Her child was also cognizant of the difference; he is keenly aware that his siblings can access care whenever they need it without worry, and he often asks his parents about these differences:

> *He asks me why we didn't bring him here before he was born so that he has the same opportunities as his brothers…he asks me why we brought them here and I say to him so that your father works and we could have a better life, a better future; because there is no future in Mexico.*

The toll that uninsurance and ineligibility for public coverage has taken on this family are so evident that even their son, who is only 12, can articulate the consequences of this distinction.

In even starker contrast, the two naturalized citizen mothers had been able to access ESI for their children for several years and as such they have not had to think much or worry about what they would do if their children got sick. Gissel shares:

> Actually I've been in my current job for quite a while, so I don't have to worry about insurance, all I have to do is renew every year, so I know it's there. But I can see other people if they don't have like a full time job and they don't have benefits I can see them struggling… Some jobs that I worked with, that I worked for I guess, you had to be a part time employee, work certain hours in order to get the health insurance or benefits, they call it. So I used to thank God I was always working full time so I always qualify for that. Even if I work like for a year or so I would have that coverage until I leave that company. If they don't offer those benefits I don't know what will happen. I don't know what could have happened to me, or to my kid, especially. {English original language}

Children's Health Care

> **"*They've always treated me without asking me these things [immigration status], because in those cases I imagine that they want one to come out alright, and the baby too."* – "Josefina"**

After discussing access to health insurance and parents' experiences seeking children's coverage, I asked parents to share their experiences navigating the health care system for their children. Much like the narrative I heard regarding access to coverage, parents of citizen children for the most part, just like Josefina, felt that they had been treated well within the health care system and had not experienced many barriers to care. In addition, parents across documentation statuses described access and use of preventative/primary and ED care for both their U.S.-born children and children born abroad. Of course, there were worrisome cases where parents and their citizen children faced major barriers, mistreatment/discrimination, and poor quality care. Undocumented children, as I have alluded to, experienced the greatest barriers to care and faced prohibitively high costs for anything other than preventive care.

Here, as in the previous section, I again focus specifically on barriers and facilitators related to parental or children's documentation status, but parents also described a number of other barriers and facilitators to accessing care as well as insight into the quality of health care for the children of Latino immigrants. In particular, parents focused on the need for and quality of interpreters and the importance of Spanish-speaking providers and patient-/family-centered care. These are coded and included in my secondary codebook, and are themes I will explore in future work.

Barriers and facilitators to care

System-level barriers

As with health insurance, for the most part parents did not indicate any major barriers to preventive or emergent care or any "negative experiences" for their citizen

children. This was the case for Medical Assistance and ESI coverage. Most parents did not feel that their own documentation status affected their children's access, as clinics and hospitals did not inquire about this. However, there were some important and highly concerning exceptions to this. Cost was an issue for some citizen children but mostly for undocumented children with no access to health insurance coverage. Lack of access to coverage was indeed the greatest system-level barrier, along with policy-level issues related to immigration and health care policies, rural isolation, and circumstances directly related to structural migration.

Most undocumented parents with citizen children – all of these children were insured – felt that they had not encountered barriers to accessing care for their children. I began the conversations about access to health care by generally asking about their experiences, and most would quickly express that they had not had "any problems" or any "negative experiences" seeking care for their children. When asked about her experience, Leticia, an undocumented mother of three US-born children covered by MA, echoed the sentiment of most of her counterparts:

> **Jessie**: *And for the children, so, how has your experience been looking for medical services for them?*
> **Leticia**: *Good. I've never fought for it.*

Even when directly probing about any barriers they may have faced, parents focused on the lack of problems; this was also the case for explicit probes inquiring about any barriers related to parental documentation status. In contrast to the discussion of parental documentation status and children's insurance – where status was not an issue despite the fact that workers asked about status or social security numbers for application purposes –

here parents reported that they were never asked about their own status when seeking children's care. This led many parents to conclude that providers do not know their status and thus they had not experienced and did not anticipate any barriers or mistreatment. In fact, most said clinics only asked for their children's insurance cards.

> **Jessie**: *Have you been asked for the social security or status when you looking for a service for daughters?*
> **Francisco**: *No, because they only ask for the Medicaid cards, that is all what the asked for.*

Some parents did report that clinics asked for more than just insurance cards. Just as the conversation often moved to children's own status when I asked about parental status and insurance, some parents described that while clinics did not consider their own status, they did inquire about their children's birthplace:

> **Jessie**: *When you have brought them to the clinic or the hospital, have they ever asked you about your immigration status?*
> **Josefina**: *No. Never.*
> **Jessie**: *They've never asked you anything about…*
> **Josefina**: *No, I just say, I brought my child and this happened to him, that happened. And they serve me, they never ask me those questions.*
> **Jessie**: *They just ask for the insurance card, or the card number?*
> **Josefina**: *Yes, they just ask where my child was born and I tell them here in Hennepin county or in Saint Paul and they say OK that's fine.*

While not asking about parents' status is an important facilitator for children's access to care, hearing that clinics were asking about children's birthplace was unexpected. It is not clear whether this was at the point of application for MA or when seeking services, but this mother had been clear that her children had been insured since birth so it appears this information was requested at the time of services.

However, not all parents felt that they had been treated equally when navigating the health care system for their children. Irma described feeling "invisible" to providers,

specifically at the ED. Although she didn't attribute this to her status at that exact moment, throughout the interview she did refer often to this and her vulnerability related to that:

> *Well sometimes in emergencies like they don't really consider you, like I'll say that they don't give you much importance or notice you.*

Irma did not feel that she was treated this way at community clinics, but described several times she had felt either she or her children had been disregarded at hospitals.

In another case, a young citizen child had been restricted from being considered for a life-saving transplant after it was discovered that his mother was undocumented. Mayra described the painstaking details of this case:

> We have right now, a patient…I believe he's six years old. He has had [condition omitted] problems forever, since he was very little. He needs a [omitted] transplant. They won't put him on the transplant list because his mother is undocumented. He is a US citizen. He was born here, but he can't get on that list, the donor can't give him a transplant because his mom doesn't have documents. And that is devastating. This child is very ill. He has to have like a nurse in the house, for 12 hours every day, a nurse there. He has all this medical equipment in the house, he has these nurses, he has to be on a certain diet, he has to take certain medications, and he's very ill. He's very ill. And the family actually went to another state because he was on the transplant list and he was supposed to get that transplant, but they realized that mom doesn't have documents and they canceled the surgery and sent him back. So this mom, you can't imagine, how depressed this mom is. I know that herself, she has had a lot of traumas as a child and as a teenager and just having this child who is very ill and not knowing if he's gonna make it another day. And knowing that he can't have that [omitted] transplant because of her status, it's just devastating. And I can't even describe to you with words how sad and how difficult and how depressed she is and how paralyzed, I mean you get to the point where I think you just become so paralyzed because you're incapable of doing anything for your child who is dying because of these ridiculous policies.[36] {English original language}

[36] Omitted for confidentiality purposes

The connection to parental documentation status in this devastating case could not have been clearer. After months of exhausting all other options, Mayra and her colleagues had come to the conclusion that the only way this boy could get on the transplant list was for his mother to have her immigrant status adjusted:

> So right now we're trying to figure and we have been working to try to get her at least a new visa status because she qualifies for it but again it's like just trying to advocate, like if you advocate I know that there's certain things, you could make it happen but if you are just like a community member out there in the community and don't have resources or don't have the right connections, you're not gonna get anywhere, you're not gonna get anything. And I think that this is what we need, we need people out there, we need people knowing that these things are happening…I mean, the child is, like I said, a US citizen and in my point of view has every right as any other US citizen and I don't think that people know that these kind of things are happening. They don't know because nobody talks about them. {English original language}

Although this was the only participant to share an experience such as this, Mayra's urgency and exasperation that people don't know "that these kinds of things are happening" suggests there are other families facing similar battles. Even if were an isolated event, the shear gravity of the situation deserves urgent attention.

Beyond parental documentation status, children's status was of course especially important for those families with children who lacked documentation. Although they were able to access preventive services through a large safety net ACO, families discussed barriers to emergent care and contrasted the quality of services their citizen (insured) and undocumented (uninsured) children were able to access. Margarita, who painstakingly described the competing feelings of security and worry she felt for her mixed-status children's health and health care, again articulated the consequences of uninsurance for her eldest child:

Jessie: *And in taking them [the youngest children] to clinic or the hospital…How has your experience been looking for these appointments?*
Margarita: *Well, thank God! All has been good getting those appointments*
Jessie: *And for the eldest child, how has it been looking for appointments?*
Margarita: *For my older child when it is an emergency, I try to treat him anywhere, when they are appointments like physical checkups at the clinic, they provide health services to him in the same clinic where I go, because the insurance does not help me.*
Jessie*: Are they like basic services?*
Margarita: *Yes, only the basic.*
Jessie: *Preventive, and when it is…*
Margarita: *For an emergency I can't take him if he doesn't have insurance.*
Jessie: *Ok and… Has that happened to him?*
Margarita: *Yes, it has happened twice that he couldn't breathe because he had really bad chest pains to such a point that they operated. But I keep seeing those bills…very expensive. He hasn't gotten sick like that again, at least not an emergency, not as much. But like checkups or appointments at the clinic, I don't pay anything with the insurance [discount plan] that I have, even the dentist sees him, I pay a certain percent but it's not a lot.*

From Margarita's and other parents' accounts, children's documentation status in and of itself would not be a barrier to care; parents are able to take their children in for preventive or emergent care and do not express fear in doing so. Rather, it is at the systemic or policy level that children's documentation status acts as a barrier to care, through the lack of access to coverage, whether public or private. Then as a consequence of uninsurance, parents are hesitant to seek emergent or specialty services, especially when they have already been hit with prohibitively high bills that take years to pay off.

In discussing costs related to specialty dental care in particular, an illustrative contrast arose that provides clues to the multi-layered forces that may lead to delayed or forgone care for undocumented children. Because dental care is widely known to be more difficult to access, especially for individuals with Medicaid/CHIP coverage (Edelstein & Chinn, 2009), I always asked families specifically about their access to dental services.

Interestingly enough, most parents whose children had MA did not report barriers to accessing dental care. Rather, Margarita's son – who is undocumented and uninsured – faced the greatest cost-related barriers, and an identical scenario described by Gissel provided an informative comparison.

Margarita was able to access preventative dental care for her undocumented son through a large safety net ACO. However, she recently had been informed that their son – who was uninsured – needed braces but she and her husband had not been able to go through with this treatment since learning that it would cost them nearly $4000. On the other hand, Gissel discussed her relief and satisfaction with only having to pay $1500 out-of-pocket for her son's braces; the rest would be covered by their ESI. Margarita discussed this situation with much anguish and worry:

> **Margarita**: *Like now, my child has very bad teeth and needs braces because he suffers much pain. According to him [the dentist], it was very urgent that we put them on, but not having insurance, we have not put them on. In the clinic they couldn't do anything, they referred us to another clinic that charges four thousand dollars and as an initial payment they charge two thousand dollars and it is very difficult because my husband is the only one that works.*
> **Jessie**: *Aha, of course.*
> **Margarita**: *Yes, the doctor of the clinic told me if we had insurance, it would be easier because the insurance doesn't cover everything but the most of the price, because he needs braces urgently. He feels much pain because he does not have good teeth, but because of the [lack of] insurance we can't do anything.*

Gissel, while understanding and empathizing how it must be on the other side, discussed her own situation with relief and no worry:

> **Gissel:** But once I started working, like I said, I never had to worry because I knew my insurance was there to cover it. And as a matter of fact, he had some dental work done, you know it's been so much easier, I don't have to pay too much out of my pocket, as like, I mean there's things here and there that I have to pay for, but it's I mean, I'm assuming if I don't have health insurance, how am I

> gonna do that? Because it is expensive… Oh my gosh! And I don't know why, it's just like, he had to get braces, you know and that is expensive. And if I didn't have that insurance I don't know how I would be able to cover that.
> **Jessie**: Did you still have to pay quite a bit out of pocket?
> **Gissel:** I paid but it was not as much. Probably I paid maybe like $1500. Which to me is not a lot. But compared to having to pay everything yourself, you know. And I guess that, like I've seen other people struggle with it, you know they can't afford to pay their bills, or it's just too much. {English original language}

It was not only the differences in the children's status that contributed to their disparate experiences. Indeed, because Margarita and her husband were undocumented, employment options were severely constrained and they were just getting by – her husband had worked between seasonal construction and in a factory/warehouse with no benefits and low wages and Margarita described making just enough (if that) to get by and cover rent, food, and other bills. Gissel, on the other hand, worked in an office for a large financial institution with generous benefits and judging by her observation that $1500 "is not a lot" earned enough to lead a comfortable life.

Parents also explained that the quality of services available – not just access to services – differed between insured vs. uninsured children. Here, Roberto, who was himself undocumented and had mixed-status children described this difference:

> *It got to the point…where there was a lot of stress in our house because…because we have in our home Mexican citizens, children born in the U.S., one daughter born in Mexico, and then us who don't have insurance…whether it's from the state or we pay for it or whatever. Umm, our children saw the differences, "why does he have insurance, why does he go with a doctor who is friendlier, who is better, why do they give him better medicine and not me?...Why don't I go to a hospital, a clinic that is nice, clean, and with better services?*

Also intriguing about this father's account is his children's acute awareness and questioning of these differences. His children were older adolescents who had been in the U.S. since they were very young and, as such, have been observing this disparity for

quite some time and had probably begun to learn about the many challenges they faced that their US-born siblings did not. Yet, Margarita's son referenced in the above descriptions of forgone emergent and dental care understood deeply how his place in the U.S. differed from that of his younger siblings – and he was only 12 years old. This son – who wondered out loud to his parents why he hadn't had the fortune of being born in the U.S. like his siblings – also understood what that meant for his (lack of) access to care:

> *He tells me that he wants to go to Mexico, because he tells me 'I get sick here and everything is expensive'…my son is big and already thinks like an adult and sometimes thinks about going to Mexico, then he tells me: 'mom this is why I want to go to Mexico," but I tell him; "In Mexico it will not cost four thousand dollars but will be ten thousand dollars or fifteen thousand pesos but we do not have money.'*

Dental and emergent care were not the only specialty services that parents struggled to access for their undocumented children. Sofia, another key informant from a large safety net ACO described that for most specialty services, families without access to insurance, such as those with undocumented children, had to pay everything out-of-pocket, which more often than not led to delayed or forgone care:

> *there's a discount that's basically for primary care, preventative. When it deals with a specialization, surgery, something more complicated, this discount doesn't cover it because it has a given price, nothing more, for this type of discount. So when a family comes to the point of needing to see a specialist, unfortunately we have to explain that they'll need to pay out of pocket. But when it's a specialist consultation, it's a lot more expensive than a simple general medical consultation. The specialists can be more than a thousand dollars for a consultation. And if it's an operation, it's a lot more. So, sometimes the state can give emergency assistance, but it depends on the case--it's a case-by-case basis. I don't want to say that everyone qualifies for this type of assistance. So, if there's a large obstacle, families either end up doing nothing and having that medical problem for years until who knows what happens--or they risking having a debt for who knows how many years. But they don't have many options.*

Parents are clearly left with few options and must choose delaying care and living for years under the stress of debt and collections. Key informants also pointed out that when there are several family members with no access to insurance who need care, these costs can up very quickly, making the potential cost even more prohibitive. For some specialty services, though, cost is not even an issue because access has been completely blocked. Sofia goes on to explain the urgency of the situation:

> *There's only one clinic in the county that is receiving it, but it has certain capacity limits. There's a time when they don't accept any more patients. And there's a big demand for this service now…it's incredible. Incredible… Nearly all the clinics that have a discount according to their income are full, they're totally full. And there are children that need help immediately. You know, they can't wait.*

Undocumented families undoubtedly experienced the greatest and most prohibitive cost-related barriers; however, these families were not alone in experiencing these barriers to care. Interestingly, but not surprisingly, both families with ESI – because they had high deductible health plans – expressed greater concern about costs than the families whose children held MA – as full Medicaid/CHIP coverage tends to cover everything. While emphasizing that she had not had any "issues" accessing care – Nancy nevertheless drew attention to the out-of-pocket costs she is responsible for as a potential barrier.

> **Jessie**: And so for all of your, for all three children, what has that been like seeking medical care for them? For their needs and for preventative.
> **Nancy**: I haven't had any issues. I've always been able to get medical attention to them when needed, so I feel like I haven't had, other than you know, having to pay for the portion of the cost I haven't had any other barriers. {English original language}

Both mothers also expressed frustration with these high costs associated with their ESI, in particular the fact that because they are not income-eligible for public programs they

cannot get help with any of these costs. They lamented a system that does not help middle-class families, wondering why there cannot be any funds in place that cover at least part of the costs instead of a system that covers all or nothing. That being said, both mothers were also quick to share their gratefulness for having been able to migrate as legal permanent residents and naturalize shortly thereafter and thus access the advantages that come with having status – stable, well-paying employment and employer benefits.

Another system-level barrier identified in interviews – although through key informants only, because I did not interview any parents outside the Twin Cities metropolitan area – was the isolation undocumented parents experience in the rural areas or "Greater MN." State- and federal immigration policy – such as no access to driver's licenses and immigration enforcement at the municipal or county level – exacerbate these barriers. These policies further restrict access by impeding travel to metropolitan areas to access immigrant-friendly, language appropriate care not available in many rural areas. As Grecia described, from her work all over Greater MN and in bordering states, these barriers are manifested over a two-step process. First, families attempt to access care in rural areas, which is limited and often leads to fear of accessing these services in the future:

> *In the rural areas the problem is larger, because they don't go to the doctor, even if they feel sick, they try home remedies. But when they've gone for emergencies they've left scared because they've had to pay a lot and they don't know that they can also apply to programs that can cover the emergency and not have to pay it. Here is the problem, that they're left scared and say 'no last time I paid a lot and it took me years to pay off that debt and I don't want to go back' so for that reason…*

Then, even though families know that safety net care may be available to them in metropolitan areas, immigration-related policies restrict their movement:

> *The families that live in the rural areas feel even more limited in their abilities to navigate the system, in any system even- in any process they want to do because they…for them to drive to the urban area, they have to drive here. And they don't have a driver's license so they have the problem that they have to depend on another person that has a driver's license to be able to come to an urban area where they can have access to more services and to a place where they can help them in Spanish because in the rural area they find that the Spanish they can find is very limited in comparison with the urban area…also they don't want to leave the places where they are working and living because if they are undocumented when they come to the Twin Cities, it turns out on the highway there is always a police man watching the traffic and it turns out that when he sees a car with a lot of people in it, well it isn't common and he stops them. That is how they realize that the people inside are undocumented and they call immigration. They have the problem that they can be deported. So, for that reason they also try not to move from the place where they're working…*

Similar to previous examples of the relationship between documentation status and access to care, it is clear that immigration policies at the federal-, state-, and local-level have profound consequences.

Finally, key informants identified a barrier somewhat unique to immigrants, which dealt with both U.S.-born children and children born abroad living without any parent in the household, or even in the county for that matter. This barrier impedes access for both coverage and care, as other family members with whom these children are living are not able to vouch or act as their legal guardian, which is necessary (or they perceive to be necessary) to access services. For U.S.-born children, this consisted of both children of deported parents and parents who had traveled to their home countries during family emergencies and subsequently were not able to re-enter. More common among children born abroad were situations where parents send children to the U.S. to live with extended

family, prior to parents migrating themselves, or parents travel home due to family emergencies but are not able to re-enter the U.S. My study design implicitly would not pick up these families, because I was interviewing parents. However, the issue still deserves mention and discussion here, as key informants spoke of both direct experience with such cases and more generalized information about these cases nationally. As Grecia explains, this situation is especially difficult for undocumented families, as they are not able or are understandably hesitant to officially become a legal guardian:

> There are many children that enter the country alone and they are under the care of relatives and it turns out that they don't receive medical care because the relatives don't have authorization from the parents to take the children to the doctor and sign for them…So, that is another fear that keeps kids from getting medical attention because 'I'm not the parent of the child and I don't have any papers and I don't have any letter from the parent that says that I'm responsible for the child and that there isn't a problem' and that is another thing, the child is here with an aunt or a family friend or a person that isn't even related to them, isn't a family member and so that person cannot sign as a guardian and so for that reason oftentimes they don't take them to the doctor.

When other family members are caring for these children it appears that the fear and concerns related to documentation status may be even further aggravated. In addition, they demonstrate the connection between broader immigration policies and access to health care.

System-level facilitators

Beyond access to coverage, which I have discussed extensively, the only system-level *facilitator* of care that I identified as related to primary question was that of safety net care, which ranged across small faith-based safety nets, community clinics, large ACOs, and services specifically for migrant workers. Although I have described the

limitations within the safety net, because they do not cover specialty or emergent care, the safety net was still crucial for parents for at least accessing preventive and regular care for undocumented children. In addition, these safety nets were important tools for connecting parents with community health workers who help undocumented families navigate the system.

Community-level facilitators

CHWs are a key aspect of coordinating care within the safety net. This was especially the case for navigation of care for undocumented children whose options for care are limited, but important still for undocumented parents navigating care for their citizen children. Although parents never specifically named "community health workers," possibly because this is a term used more on the provider/policy side, they did explain how clinic staff helped them access linguistically- and culturally-appropriate primary care, request referrals for specialty care and follow up on these referrals, and negotiate any bills that resulted. Key informant CHWs also described how they attempt to aid parents in overcoming common barriers to care and barriers specific to uninsured (undocumented) children.

As I have discussed, the CHWs I interviewed worked in a small faith-based safety net, a small program with a large ACO safety net, and a social services agency. In addition, the MNsure navigator I interviewed was previously a community health worker in her same organization, a mid-sized safety net. First and foremost, all CHWs described the importance of referring parents directly to Spanish-speaking staff within clinics. As opposed to simply telling parents to go to a certain clinic, they emphasize that they

should look for a specific person (they give them the name of this person), who speaks Spanish and will treat them well, and then CHWs almost always follow up to make sure the parents have made this connection or to address barriers that have prevented them from doing so. Key informants expressed that parents were fearful to seek out clinics for fear of the unknown, mostly related to language and documentation status, which CHWs attempt to counteract:

> **Grecia**: *It helps them a lot when I tell them that at the place that I am referring them to there is a person that is named- I give them the name of the person and then I tell them, that person speaks Spanish so you can trust and ask her whatever you need to know, she can help you, and you can tell her I referred you to her. When I do all this, this process of referral they feel more confident and that is how they call and they can then receive the service.*

These CHWs were careful not to simply hand parents a sheet of paper with a list of resources or name potential clinics, but rather to walk them through the process and address barriers to care that may prevent them from being able to follow up with referrals. As Mayra explains:

> they don't leave the clinic on their own with a paper that says you have to call this or that place to schedule this appointment. What happens is they know that me, as a community health worker, we'll make sure that that appointment is made, and make that they know where they're going and that. So I think that that's the biggest thing that we do, ensuring that they understand the medical system, kind of knowing that the care is not always at [name omitted], that when they need other resources that we can't provide that they're gonna have to go to other clinics or other agencies in the community to get those. {English original language}

Mayra also described that it was essential to connect undocumented children with financial counselors within their system before they ever received services, so that they could be sure they wouldn't be hit with more high bills:

> So what our role is, is to make sure that this family has an appointment with a financial counselor, if possible, before even coming in with our program. Because

> we don't want them to be stuck with a bill if they don't qualify for a full discount, we don't want them to get a bill and be stuck with and you know, decide whether I pay my groceries or pay this bill. So that's why we try and its one of the biggest priorities to make they see a financial counselor and it's very likely that they're gonna qualify for a full discount because of their income level. {English original language}

Given the enormity of costs as a barrier for undocumented children, this step is crucial for preventing delayed and forgone care.

Lastly, another important facilitator of access to care, just as with access to coverage, was "word of mouth" and referrals among family and friends. Parents described a feeling of trust and ease when having been referred by friends and family, especially when first encountering the system and feeling hesitant and familiar with eligibility related to documentation status.

Individual-level barriers

The most significant barrier, according to parents (and key informants) at the health care level was language. I did not identify any individual-level facilitators in my primary codebook. As previously discussed key informants found it very important to refer parents directly to Spanish-speaking staff, as opposed to just referring parents generally to clinics. Immediately connecting with Spanish-speaking staff and providers, or communicating through an interpreter was crucial, especially on first visits, as parents would hesitate to return to a clinic where such services were not available. Language was so central to parents' experience that Alma even offered this observation – without my probing:

> *My problem is not related to immigration; it is that I do not speak English fluently.*

There was one particular incident that still stood out in her mind, and although it was related to her own prenatal care was illustrative because of her insistence that documentation status was not the foremost issue.

As with other areas in my findings, because the vast majority of my codes related to language barriers and access to quality interpreters fell outside of my question at hand, I do not discuss. However, I would argue that language barriers are certainly related to other barriers associated with documentation status because of the stark differences in opportunity in parents' lives. For example, only one of the nine undocumented parents reported being able to speak English well enough to not feel the need to request interpreters. In contrast, all but one of the five "documented" parents did not use interpreters, although they had in the past. Furthermore, the two naturalized citizen mothers I interviewed were the only parents who preferred to conduct the interview in English. Not surprisingly, then, they focused a substantial part of their discussion in their lack of confidence in interpreters and past experiences where they felt their words were not translated correctly leading them to realize that they themselves could communicate directly and more effectively with English-speaking providers. These parents clearly were able to learn English because of the life opportunities that came with their status; and their status and English fluency facilitated access to their stable, well-paying jobs.

Discussion

I came into this last aim with clear areas of focus, informed by AIM 1 and 2 findings, and with the purpose of exploring documentation status on a deeper level and beginning to understand more about realized access to care. I also came in knowing that I

was exploring these issues within a state that ranked high – but not highest – on my immigrant access to coverage index, and that these policies (or a lack of policies) in Minnesota would certainly prove important, but I had not expected for the influence of these policies to be so clear and overt, for both parents and key informants and in the analysis of their narratives. Findings have only strengthened the need for an ecological framework (Brofenbrenner, 1986) that conveys how the macro-level of structure and policy so strongly permeates the "micro." Minnesota, in hindsight, is an informative setting because legislation provides a pathway to coverage for some of the most vulnerable immigrant families, while simultaneously blocking the most vulnerable children. As a result, families, especially families with mixed-status siblings, experience a heightened awareness of the profound differences that are simultaneously created and maintained by federal and state-level immigration and health care policy. On the one hand, prenatal coverage is available to all income-eligible pregnant women, regardless of immigration status, and this coverage is then automatically initiated for their newborn children, mitigating any fears or hesitation undocumented parents may feel. On the other hand, since 2003, undocumented children – the children of these same mothers covered during pregnancy and siblings of the citizen children covered at birth are systemically blocked from accessing coverage. As I have demonstrated in this chapter, these differences are front and center for parents, and even for children themselves, and the contrast in access to care and in parents' level of security or insecurity illustrates the effects of these policies.

Parental documentation status

As I emphasized in Chapter 2 (Methods), my placement of children's citizenship and parental documentation status at the individual- and family-level in my ecological model was not because I thought they were determined at those levels, but rather because they were measured at those levels. In fact, they are arguably almost entirely determined at the system level, and thus a model that demonstrates interactions and outer rings of influence is important. These findings strengthen the evidence for this assertion, and in fact, I categorize documentation status as a system-level barrier in my qualitative codebook and have presented findings as such. At least among these MN participants, documentation status seems to operate only through what eligibility and or restrictions are tied to this status through policy. Beyond this, contrary to my hypothesis and in line with my quantitative findings, for many parents their own lack of or precarious documentation status was not perceived as a major barrier to citizen children's coverage. Parents had a strong understanding of their children's right to coverage as citizens and expressed that even though they were asked about their status when applying for their children, disclosing this would not affect them or their family.

There were system-, community-, and individual-level barriers and facilitators to coverage and care that were intimately tied to parental documentation and/or children's citizenship status. Some parents reported having felt hesitant or confused when first accessing public coverage, and key informants confirmed this in their experiences with parents generally. Income verification, especially for undocumented parents working for cash, was another system-level barrier that was a source of anxieties and vulnerability. In

addition, documentation status at times presented itself as a barrier for parents applying for other public benefits on their children's behalf (e.g., food stamps, SNAP). The ACA had presented newer barriers to enrollment for mixed-status families who faced unique barriers to streamlined enrollment (e.g., inability to apply online) and fear/confusion related to eligibility and data-sharing, where citizenship and documentation status (of the applicant) are verified with the Department of Homeland Security (DHS).

Again, although most parents did not express any major barriers to enrolling their children in MA within the traditional county-based system in MN, the new ACA-related requirements could very possibly lead to delays in enrollment or an ability to enroll children. For example, despite a 2013 DHS memo stating that immigration information would not be used for immigration reinforcement, and navigators and assisters' communication with parents on this point, there is evidence that these new enrollment pathways may be deterring mixed-status families from enrolling eligible members (DiJulio et al., 2014). A longitudinal survey of uninsured adults in California found that almost 3/4 (73%) of uninsured, undocumented Latinos reporting worrying that enrolling in coverage could expose their family members' statuses and 72% of uninsured Latino immigrants also worry that enrolling could affect their chances of being a U.S. citizen in the future (DiJulio et al., 2014). These findings are of course from another state, but represent the only evidence to come out so far related to these concerns, highlighting an area that will need to be monitored in MN and across the country going forward.

Like access to coverage, for the most part parents did not feel their status was a barrier to children's care, but there were instances that deserve mention, such as one

undocumented mother, Irma, who felt she was invisible to her child's ED providers. She did not specifically name her documentation status as the reason behind this treatment but that was a common narrative across her interview. While most parents did not express having felt mistreated, her experiences were consistent with findings from a similar, but larger qualitative study of rural Latino immigrants' access in the Midwest (Cristancho, Garces, Peters, & Mueller, 2008), where immigrants reported having experienced provider mistreatment and discrimination due to their status.

I learned about a second, troubling case indirectly through a CHW key informant who is deeply familiar with the health care system and immigrant children's access. She recounted a case she was currently facing in which a young US-born citizen child was being denied access to a life-saving transplant because his mother was undocumented. He had been on the list for a transplant until his mother's status was revealed, and they were currently trying to help her adjust her status so that her son could get back on the list. This is as poignant an example as any of the powerful link between immigration and health care policy – her son's fate in the health care arena will ultimately be decided by the immigration system (Ruiz-Casares, Rousseau, Derluyn, Watters, & Crepeau, 2010).

As I have attempted to make clear, most barriers related to parental documentation status occur at the system-, policy-level, precisely because documentation status itself is a product of a (lack of) immigration policy. I did identify one "individual-level" barrier to care – language, but even this is directly and indirectly tied to documentation status and the structures that enable or impede certain immigrants from

learning English and thus being able to access coverage opportunities (e.g., ESI) and advocate for their children's care.

Pathways to coverage and care: Citizen children

As I discussed extensively in my findings, through speaking with parents, I gained great insight into the effectiveness of two key policies in MN that 1) provide prenatal coverage to pregnant women, regardless of immigration status, and 2) automatically enroll newborns in MA when their mother is covered by the same at birth. The effectiveness of these policies lies in their roles as the mechanisms through which parental documentation status is prevented from becoming a significant barrier to coverage for citizen children. This insight has proved fundamental within my overall study, as I was able to go back to my quantitative component in AIM 2 and test a revised immigrant access to public coverage index to highlight states that cover pregnant women regardless of documentation status. Indeed, I found that this helped explain large disparities in the effect of parental documentation status across states. In states (16 states + DC) where pregnant women were eligible for Medicaid/CHIP regardless of documentation status, rates of uninsurance were essentially equal between citizen children with at least one undocumented parent and those with only documented (citizen or LPR) parents. On the other hand, states where undocumented pregnant women were not eligible for full Medicaid/CHIP coverage saw large disparities (a nearly 17 percentage point difference) between children with at least one undocumented parent and their counterparts. In fact, disparities in these states appeared to account for nearly all of the disparities at the national level, while the states where disparities do not exist may

mask this effect and help explain why nationally disparities are not as large as I would have expected. This also demonstrates that in states without these policies, parents likely face many more barriers in enrolling their children, but most importantly barriers related to and interacting with their own documentation status.

I also learned that community agencies, and even county offices, play a major role in communicating these policies to parents, reassuring them that although they may ask for a parent's social security number for application purposes, pregnant women and citizen children have rights to coverage. Parents are often connected to these agencies through friends and family, so they also play an important role in ensuring that parental documentation status does not act as barrier to prenatal or citizen children's coverage.

Undocumented children: Restricted access

Although Minnesota covers pregnant women regardless of immigration status, undocumented children themselves have been restricted from MA since 2003. In addition, restrictions on Emergency Medical Assistance first enacted in 2012 (Aslanian, 2012) blocked the only potential pathway to public coverage for undocumented children. As such, undocumented children only have access to limited preventive services and face serious barriers to specialty care. Furthermore, the prohibitively high costs they experience when they do utilize emergent or specialty care leave parents scared and worried about the next time their children will get sick. The safety net that at least provides access to these limited services is not always available to families in rural areas, however, and isolation and fear, as well as restrictions on mobility for undocumented families, especially, enhance these barriers. As key informants described, due to a lack of

driver's licenses coupled with a law (immigration) enforcement presence on major freeways, parents are not able to move around to access services in areas beyond where they work and live out of fear of detection and deportation, or what de Genova has termed as "deportability" (2005). In another areas, as was the case for the parents I interviewed and most of the families with whom my key informants have interacted, parents are not fearful due to their documentation status but their children are still shut out because of health care policy. A picture of access for undocumented children in MN, then, is one of restrictions filled in by pockets of safety net care, that no doubt vary greatly across the state.

Nationally, undocumented children are only eligible for coverage in four states (Illinois, Massachusetts, New York, and Washington) + the District of Columbia (California will join that list as of June 2016). Apart from this recent change in policy in California, this number had not changed for over a decade. Youth with DACA, however, are eligible in MN and five other states + DC (NCSL, 2015). Interestingly, MN is the only state to cover DACA youth that does not also cover undocumented children. Recent work on access to care for these youth provides some insight into additional barriers undocumented children and DACA youth may face even if coverage is available. Youth reported cost as one of the greatest barriers to care, along with no access to driver's licenses, and fears of being discriminated against by health care providers (Raymond-Flesch, Siemons, Pourat, Jacobs, & Brindis, 2014).

In some states across the country, access to care for undocumented children is likely very similar to that of access for children in MN; and this study could be

informative for those states. However, in many other states, although health care policy "on the books" as related to undocumented children is similar to that in MN, families likely experience even further restricted access. For example, the size and accessibility of the safety net, as well as the availability of culturally- and linguistically-appropriate providers, vary greatly across states (DeRose et al., 2007; Holahan & Spillman, 2002). State-level immigration policies (National Council of State Legislatures (NCSL), 2014), as I discuss below, no doubt lead to differential access across the states, as well.

Constrained access to ESI

My discussion with parents of access to ESI reflected McGuires & George's description of a system where undocumented immigrants are "unofficially welcomed and officially unwelcomed" (2003, p. 1167). ESI offer was clearly related to documentation status and parents themselves discussed this connection explicitly. This ranged from companies where all workers were undocumented and not offered any benefits to companies within which only documented workers were offered coverage. Thus, even though "official" immigration and employment policies do not welcome undocumented immigrants, "unofficially" their labor is strongly encouraged by both employers and the government. Importantly, though, as was apparent in some of the parents' and key informants' narratives, employers are rarely implicated for their role in this unofficial system. Rather undocumented immigrants bare the brunt of this blame, are given few benefits in exchange for their labor, and are left with little to no recourse if their employer takes negative action against them (Lowe, 1998; Lyon, 2004). Roberto's case especially was indicative of such a system. Although he was able to access affordable

health benefits, he was left with a severe workplace back injury and lost his worker's compensation benefits, his family's ESI, and his job itself.

It is important to note that ALL undocumented parents in this study would have been eligible for *Deferred Action for Parents of Americans* (DAPA), as they had been in the U.S. for more than five years and had citizen children. However, at the time of my defense, a federal judge had issued an order that temporarily blocked this executive order and a federal appeals court upheld this injunction, and the Obama administration had announced that it would not be issuing an appeal. Because nearly the only option to coverage for undocumented parents and children was through an employer, DAPA might have had significantly positive effects on access to ESI, through the ability to work legally and thus access benefits afforded to their documented counterparts.

This chapter, in exploring parental documentation status and access to coverage and care at the local level, provides insight into facilitators for citizen children, despite their parents' undocumented status. Still, large barriers to ESI persist, and undocumented children face a landscape with severe restrictions to both coverage and care.

Table 5.1.Demographics and Insurance Coverage: Parents and Children

Parents (N=14)	**Documentation status**				
	Naturalized citizen	**Temporary protection status**	**Provisional status**	**Undocu-mented**	**Total**
Total	**2**	**1**	**2**	**9**	**14**
Mother	2	0	1	8	11
Father	0	1	1	1	3
Single-parent family	2	0	0	2	4
2-parent family	0	1	2	7	10
Number years in U.S.					
less than 10 yrs	0	0	0	1	1
10 years or more	2	1	2	8	13
Children's birthplace					
Only U.S.-born children	2	1	1	7	11
Mixed-nativity	0	0	1	2	3
Number of children*					
1 child	1	0	0	0	1
2 children	0	0	0	2	2
3 children	1	1	2	5	9
4 children	0	0	0	2	2
Employment					
1-parent family: employed	2	0	0	2	4
financial/professional	*2*				*2*
janitorial				*1*	*1*
informal				*1*	*1*
2-parent family: 1 parent employed^	0	0	0	5	6
food service (spouse)				*3*	*4*
factory (spouse)				*2*	*2*
2-parent family: 2 parents employed interviewee/spouse	0	1	2	2	4
(interviewee/spouse)					
temp/informal		*1*			*1*
temp/factory				*1*	
food production (both)			*1*		*1*
small business/food service			*1*		*1*

factory/unknown				*1*	*1*
Insurance status					
Employer-sponsored insurance (ESI)	2	0	0	0	2
Public	0	0	1	0	1
Uninsured	0	1	1	9	11
Uninsured w/ "discount" plan	*0*	*1*	*1*	*7*	*9*
Access to ESI					
Yes	2	0	2	2	6
No	0	0	0	3	3
Only in past	0	1	0	2	3
Don't know	0	0	0	2	2

*Total number of children=39 (see Table 5.2)
^ In each of these five 2-parent families in which one parent was working, the working parent was the interviewee's spouse

Children (N=39)	**Parental documentation status**				
	Naturalized citizen	**Temporary protection status**	**Provisional status**	**Undocu-mented**	**Total**
Total	**4**	**2**	**6**	**27**	**39**
U.S.-born	4	2	4	25	35
Born outside U.S.	0	0	2	2	4
Age					
Less than 3	0	0	0	2	2
3-6	0	0	1	9	10
7-10	0	0	1	5	6
11-14	1	1	2	8	12
15-18	1	1	1	1	3
>18	2	0	1	2	6
Insurance status					
ESI	4	0	0	0	4
Public	0	2	4	25	31
Uninsured	0	0	2	2	4
Uninsured w/ "discount" plan	*0*	*0*	*2*	*2*	*4*

CHAPTER 6. CONCLUSIONS

Chapter summary

I conclude my dissertation by discussing barriers to coverage and their connection to immigration policy and the labor market, the role of state-level health care policy in mitigating or exacerbating disparities between children with undocumented parents and their counterparts, and the vast barriers undocumented children face in the current policy context. I then present limitations of my dissertation overall, followed up by arguments for how my work contributes to the literature and policy despite these challenges. Finally, I frame future work, both quantitative and qualitative, that would help address my limitations and further understanding of the parental documentation status and children's access to coverage and care.

Discussion

Disparities in insurance coverage between the children of Latino immigrants and their peers are substantial and enduring. My dissertation sought to understand how barriers that emerge at the intersection of immigration and health care policy – barriers shaped and maintained by social constructions of deservingness – contribute to these disparities. First and foremost, I aimed to delineate and better understand the relationship between parental documentation status and children's coverage. I situated parental documentation status at the core of my work because it is itself a "policy-created" classification (Abrego, 2011) through which the consequences of immigration and health care policy are revealed.

Indeed, my examination of parental documentation status among a nationally representative sample of children of Latino immigrants provides evidence of a strong gradient of insurance coverage. Children with citizen parents have greater access to the resources necessary for securing insurance, and children with undocumented parents greater vulnerability. As further evidence of a gradient, children with noncitizen, documented parents (e.g., LPR parents) experienced higher uninsurance rates than those with citizen parents, but lower than children with undocumented parents. To be sure, even children with citizen parents experienced high uninsurance rates, but attention to documentation status exposed even greater disparities previously masked in research examining only parental *citizenship* status.

Immigration policy and access to ESI coverage

The manifestation of explicit and latent barriers directly tied to immigration policy is evident in the distribution of coverage across parental documentation status, in particular the fact that citizen children in two-parent working families where one or both parents were undocumented were significantly less likely to hold ESI coverage than their counterparts with two citizen parents. These disparities held even after adjusting for common, strong predictors of ESI coverage such as part- vs. full-time employment, industry, firm size, and income. Research on ESI offer and take-up rates among noncitizen workers attributes their lower ESI rates to lower offer rates on the part of employers, not employee take-up (Buchmueller et al., 2007), so one would expect the above employment characteristics to account for the disparities in ESI in my sample. However, given the paradoxes inherent in the unofficial, yet official labor market that

depends so greatly on undocumented workers (de Genova, 2005; Lowe, 1998; McGuire & Georges, 2003), it comes as no surprise that there are barriers at play that cannot be accounted for in federal surveys.

Of course, some of these differences in ESI offer are explicit and can be ascertained to some degree with survey data. For example, are undocumented workers simply more likely to work in informal jobs that generally do not offer benefits? Nationwide, undocumented immigrants make up only 5% of the total labor force, but 25% of farming and 17% of construction industries (Passel & Cohn, 2009). I account for industry in my models, but it is also the case that jobs in these farming and construction are much more likely to function informally (e.g., workers are not on official payroll). However, whether undocumented immigrants are working informally cannot be discerned in the SIPP or other federal data sources.

Other explanations are even more difficult to establish in federal survey data. For example, do some employers restrict benefits to documented workers alone? Do the same mechanisms that might keep undocumented parents from enrolling their children in public benefits (fear, hesitation, confusion) also keep undocumented workers who are offered coverage from taking up? Determining whether the former could help explain disparities in ESI is a difficult task, but would lend credence to the assertion of immigration scholars that employers, though rarely implicated, actively recruit, hire, and exploit undocumented workers, while only the workers pay the price if this is revealed (de Genova, 2005; Lowe, 1998; Lyon, 2003). The latter explanation is also plausible, especially that ESI disparities in my analysis persisted after controlling for employment

characteristics and income. Thus, ESI offer and income do not appear to explain the whole story. Narratives from parents and key informants in Minnesota, where few undocumented parents held ESI coverage despite some of the highest ESI rates in the nation, supported each of these possibilities.

First, undocumented parents who were not offered ESI coverage were very certain that this lack of offer was directly attributable to their (lack of) documentation status. In fact, parents described this connection without prompting on my part. Parents either worked informally in jobs where no one was offered coverage, or worked "formally" alongside their documented counterparts who were offered coverage while they were not. Importantly, all parents who were not sure whether ESI was offered at their or their spouse's place of employment were also undocumented.

In addition, some parents expressed hesitation to take-up ESI benefits for fear that this may lead to their status eventually being revealed to their employer, as did key informants speaking generally about undocumented parents' experiences in the labor market. One undocumented father's experience with a workplace injury that led to his being fired and losing his family's ESI benefit, after trying to access the worker's compensation he was entitled to, demonstrates the very real possibility of barriers such as fear and hesitation preventing undocumented workers from taking up private benefits such as ESI. His narrative is also illustrative of a labor market where, although undocumented immigrants are encouraged and unofficially supported, employers are not held accountable and workers bear the brunt of the consequences should their status come to light. (de Genova, 2005; Lowe, 1998; Lyon, 2003).

State-level policy can mitigate or exacerbate disparities

My dissertation also addressed the role of health care policy, which is informed or in fact superseded by immigration policy. Federal restrictions that exclude "nonqualified" immigrants – LPRs of less than 5 years and undocumented immigrants – are clear consequences and reinforcements of immigration policies that assign degrees of deservingness (Schneider & Ingram,2005) across categories of documentation status. My state-level analysis and my interviews with parents and key informants demonstrate the salience of these policies even for U.S.-born children who are universally eligible and thus should not feel the impact of immigrant healthcare policy.

I set out to examine a broad index of immigrants' access to public coverage. However, as part of my mixed-methods design in which aims are mutually informative, I was able to use insight I gained in my qualitative interviews to go back to my state-level analyses and re-examine my state-level healthcare policy variables. In particular, I heard consistently from parents and key informants about a particular mechanism related to state policy through which undocumented parents were able to access coverage for their citizen children – access to prenatal coverage for all women regardless of immigration status. As I discussed in the last chapter, although parents did not for the most part identify parental documentation status as a barrier to accessing coverage for their children, parents did report initially confronting fear, hesitation, or confusion related to public coverage eligibility *during pregnancy*. However, because in Minnesota (+ 13 other states and DC, KCMU, 2009) pregnant women are eligible regardless of documentation status, parents described how they were able to access this coverage. Most importantly,

they also explained that during this process they 1) learned firsthand that accessing public programs did not adversely affect them, and 2) were connected to resources where they learned about their children's right to and eligibility for coverage. Hence, barriers that could have presented themselves when applying for their children were mitigated during pregnancy. In restrictive states, on the other hand, undocumented pregnant women are only eligible for Emergency Medical Assistance for childbirth/labor, not prenatal care. As a result, they might not be connected to the system during pregnancy and would have to actively enroll their children after birth, at which point they could experience fear, hesitation, or confusion about whether their own documentation status as parents affects their children's eligibility.

My state-level analyses provided evidence for the effectiveness of universal access to prenatal coverage in enabling undocumented parents to cover their U.S.-born children with little fear or hesitation. Indeed, I found no disparities in insurance coverage between children with undocumented parents and their counterparts in states that cover all pregnant women. On the other hand, I found substantial disparities, which persisted in adjusted models, in states that only cover prenatal care for "qualified" immigrant women.

Major structural barriers for noncitizen children

Finally, I must address the major barriers experienced by children who are noncitizens or undocumented. In both quantitative and qualitative analyses, noncitizen children fared the worst; over half of noncitizen children were estimated to be uninsured in my nationally representative analysis. This increased to almost 2/3 when looking at noncitizen children with at least one undocumented parent, children who are likely

undocumented themselves. Unfortunately, these findings were expected because, as a result of being constructed as undeserving along with other undocumented immigrants, undocumented children are restricted from federal Medicaid/CHIP and are only eligible in four states + DC. Apart from the recently approved coverage for undocumented children in California, over the past decade we have seen no movement to open up these benefits in other states (KCMU, 2009; Fortuny & Chaudry, 2012). Thus, as long as undocumented children are constructed as undeserving, and consequently ineligible, they will continue to face high uninsurance rates, leading to even greater disparities as uninsurance among their counterparts decreases more every year (Goldstein et al., 2014).

Also important to note, ESI rates were very similar between citizen and noncitizen children with at least one undocumented parent. Because noncitizen children do not have access to Medicaid/CHIP in most states and thus ESI is likely their only potential option for coverage, I would have expected noncitizens children's ESI rates to be higher than that of citizen children with at least one undocumented parent. The fact that their ESI rates were almost equal provides more evidence of unique barriers to ESI faced by undocumented immigrants.

Whether this lack of insurance translates into delayed and/or foregone access to care was an area I explored in my qualitative interviews. Parents and key informants highlighted the stark, painful differences between citizen and undocumented siblings, describing great disparities in access to and quality of care. Undocumented children were able to access preventive care through safety net clinics, but the cost of specialty and emergent care acted as significant, strong barriers to accessing any care beyond annual

check-ups and for minor illnesses. This was even the case within a state that has a stronger safety net. The size and quality of the safety net varies greatly across states (Holahan & Spillman, 2002), so the consequences of uninsurance on access to care for undocumented children in states with poor safety net systems are likely even worse than that of children in Minnesota.

Limitations

Documentation status measures

My dissertation takes advantage of the only measure of documentation status available within a nationally representative, public-use survey, yet the inherent sensitivity of such a measure presents limitations for survey administrators and analysts alike. As I discussed in Chapter 2 (Methods), the rate of non-response is relatively high, but the Census Bureau takes steps to correct this and I conducted sensitivity testing to assess whether my findings were affected by including vs. excluding children with parents whose status was imputed. I found that excluding these families actually increased coverage disparities related to parental documentation status, in the same direction as the gradient demonstrated in results presented here.

Two additional concerns – response bias and coverage error – present the potential for an underestimation of undocumented immigrants as a whole. First, even when individuals do respond to the documentation status measure, there is the potential for response bias or social desirability bias (Villar, 2008). Here the respondent may answer in a socially desirable manner – based on what they think the interviewer wants to hear – or in another case may respond in reaction to fear of detection or deportation,

especially given that this is a federal survey. The second concern related to documentation status, which is relevant across all national surveys, is the potential for coverage error due to higher survey non-response among undocumented immigrants (Judson & Swanson, 2011). However, a substantial proportion of my sample parents are indeed categorized as undocumented and Bachmeier et al. (2014) recently validated the documentation status measures in the SIPP, providing evidence that estimates of the number and characteristics of undocumented immigrants derived from the SIPP align well with those of other widely used models (Bachmeier et al., 2014).

ESI offer and take-up

With the respect to my finding that ESI drives the coverage disparities related to parental documentation status, my analyses of ESI coverage would have benefited from knowing whether parents were actually offered coverage through their employer and whether this coverage could be extended to dependents. This would have allowed me to measure differences in offer and take-up rates across parental documentation status; a void in the literature that I hope to examine in the long-term. The SIPP includes a topical module on employer-provided health benefits, but this topical module was administered in Wave 5 of the 2004 Panel (June – September 2005) and then not administered again until Wave 6 of the 2008 panel (May – August 2010). Basing my analysis on two cross-sectional samples with such a wide gap between them was not feasible. Fortunately, the new revamped 2014 SIPP panel eliminates topical modules and instead asks these items in each annual wave (Citro, 2013). These data, to first be made available in early 2016,

will also allow for an updated analysis of children and family's access to coverage under the ACA.

State-level analysis

My state-level analysis exposed a pattern of disparities for children with undocumented parents between states with accessible vs. restrictive policies, yet there are certainly limitations that constrain my ability to attribute these differences to state-level access to prenatal coverage. First, and most importantly, I only examined access to prenatal coverage on a macro-, state-level. As such, I did not estimate, nor was I able to estimate, whether actually having comprehensive Medicaid/CHIP coverage during pregnancy lead to an increased probability of the child gaining coverage. I did not know if the mother had Medicaid/CHIP coverage during pregnancy or in what state she lived in during her pregnancy. Furthermore, because these data reflect polices in place at the time of the survey, I could not discern whether these policies were in effect at the time of pregnancy. Even if I had access to this information, these data were cross-sectional and therefore causality cannot be ascertained.

Still, I reiterate that no matter the mechanism at work behind these disparities, undocumented families in accessible vs. restrictive states are facing disparate policies or environments that either enable or block parents from accessing coverage for their children. Although I was not able to estimate multinomial models – given my sample restrictions with multilevel modeling, bivariate analyses of the type of coverage across states and parental documentation status indicates that these gaps are attributable to lower rates of Medicaid/CHIP coverage for children with at least one undocumented in

restrictive vs. accessible states. One concern with these disparities being driven by Medicaid/CHIP is that children in accessible vs. restrictive states could have differential rates of poverty (important for eligibility determinations) and/or face different eligibility guidelines, which is certainly the case across states. However, the fact that citizen children with citizen/LPR parents in restrictive states did not experience significantly lower rates of Medicaid/CHIP than their counterparts in accessible states serves as a form of control for testing for differential Medicaid participation across these groups of states. I also restricted my bivariate analyses to only children I estimated to be eligible for Medicaid, in order to account for differential eligibility, and similar patterns emerged.

An additional constraint arises from the fact that the SIPP does not allow for state-level estimates. Therefore I cannot hone in on which states in particular see coverage disparities based on parental documentation status. Still, the differential effect of parental documentation status between these two groups of states is large and statistically significant and remains so across multiple model specifications.

Access to coverage does not equal access to care

For similar reasons related to the timing of topical modules in the SIPP in my quantitative AIMS 1 and 2 I only examine insurance coverage as opposed to access to care. Insurance coverage by no means guarantees access to care (Call et al., 2014), yet a large knowledge base demonstrates the essential role of both private and public coverage for obtaining needed care among children (Kempe et al., 2005; Selden & Hudson, 2006; Szilagyi et al., 2004). Children lacking coverage are far less likely to have a usual source of care and far more likely to have delayed or unmet need for preventive, dental, or other

medical care (Newacheck et al., 1998; Selden & Hudson). Indeed, in 2012 nearly one quarter (23%) of uninsured children lacked a usual source of care, whereas only 2% of those with private or Medicaid coverage were without a usual source of care (Bloom et al., 2013). A limited number of studies have in fact examined parental documentation status and its relationship with access to care and health status (Ziol-Guest & Kalil, 2012; Guendelman et al., 2005), and confirm a strong relationship between access to care and parental documentation status. Fortunately, I was able to begin to explore this very relationship through my qualitative work, and as I describe below I will pursue this even further in my postdoctoral research.

Limited sample in exploratory study

Still, even my qualitative work, designed as exploratory research within a larger mixed methods dissertation, faced its own limitations. Data collection occurred in a single state characterized by the aforementioned policies, and although I indirectly heard about the experiences of parents (e.g. through key community informants) across the state, the parents who participated in the interviews were limited to residents of the Twin Cities metropolitan area. My original intention was to interview parents and key informants across four Midwestern states at each level of my immigrant access to public coverage index so as to learn about a variety of experiences. However, I began with Minnesota for feasibility purposes and am eager to expand data collection to other states in the future. Nevertheless, findings from this sample could be transferable to similar areas across the country, in particular states where we see similar policies on immigrant access to coverage. These states include Nebraska, New Jersey, and Texas. Admittedly,

these states differ widely from Minnesota on a number of other factors influencing coverage, such as Medicaid eligibility levels and enrollment policies, but like Minnesota they do cover pregnant women regardless of immigration status and they do not cover undocumented children. Finally, if I had been able to interview parents in rural areas, I might have heard more about barriers and fear related to documentation status. Thus, these findings might not be completely transferable to rural areas.

A second potential limitation lies in the variation in documentation status among parents in this sample. I was only able to interview two naturalized citizens. As it turns out it was actually easier for my community liaison to identify and recruit undocumented parents and I would have been much more concerned if had been the other way around. The fact that over half of the parents in my sample were undocumented really helped me to learn specifically about the main findings from my quantitative aims that demonstrated that undocumented families experienced more vulnerability and greater disparities than their counterparts. In addition, the inclusion of three families who were stuck in a "quasi-legal" status also enabled me to learn about parents' experiences before and after losing and/or gaining status, and understand the intricacies related to the ability to work legally, public program eligibility, and fear of detection and/or deportation.

Finally, both children's and parents' insurance coverage were both quite homogeneous within my sample. All citizen children were insured, and most (all but four) had Medical Assistance. In contrast, all non-citizen children were uninsured, although they had at least some access to safety net care. This distribution of coverage does not match my findings in AIM 1 where I estimated that almost 1/3 of citizen

children of Latino immigrants were uninsured. However, AIM 1 was based on data from 2007 and 2008, and various coverage expansions have lowered children's uninsurance overall, from 9.7% in 2008 to 7.5% in 2013 (SHADAC, 2012). In addition, we know that's children's coverage rates vary greatly across states and Minnesota has one of the lowest uninsurance rates, although significant coverage disparities exist between Latino children and their counterparts.

Interviewing parents of uninsured children, especially undocumented parents with citizen children, would have been informative; and it is entirely plausible that the parents I was not able to reach are the very parents who would have reported fear in applying for services. After all, if their children are uninsured their own documentation status could have played a role. My community liaison is connected to parents who are connected to the system, which no doubt helped with study feasibility and willingness to participate. Yet that same advantage by design could have also led to a less diverse sample. In this case, it would have been very difficult to connect to parents who are not connected to social services, the safety net, and/or friends and family; and these same resources are the pathways through which parents learn that their documentation status does not affect their children's eligibility and enable them to enroll their children in coverage. I did employ chain referral (snowball) sampling (Teddlie & Yu, 2007) and was able to connect with four of the 14 parent participants through this strategy, but even those parents were themselves connected and their citizen children insured.

Future work

Key points in my findings and in each of the limitations described above inform a wealth of future research that could follow from this study.

State-level comparative analyses

First and foremost, comparative research across states, whether through quantitative surveys or qualitative methods, is warranted. There exist enormous differences across states on a number of important factors that could help explain the relationship between parental documentation status, children's citizenship, and access to coverage and care. In addition to health care policies I have discussed and plan to study in the immediate future – such as prenatal access to coverage, newborn automatic enrollment, coverage for undocumented children – the link between immigration and health care policy that was made clear through this work necessitates future work that explores state- and local-level immigration policies.

The robustness of my findings in my multilevel analysis points to the presence of enormous disparities in coverage for citizen children in undocumented families that warrant several areas of future research. Immigrant access to public coverage is only one piece of the varied and complex policies that govern immigrant access to care. There are additional general health care policies governing access to Medicaid (eligibility, enrollment, renewal, etc.) that could be at work and may also help explain my findings. Automatic newborn enrollment – combined with access to prenatal coverage regardless of documentation status – seems to be especially important for undocumented families, as newborns whose mothers have Medicaid/CHIP during the month of birth are

automatically enrolled until a certain age (12 months in Minnesota). Integrating state-level data on the presence or absence of this policy could reveal even stronger patterns than those I report here.

Furthermore, it is not hard to imagine that recent state- and local-level immigration policies, whether still active or short-lived, have deterred undocumented parents from accessing care for both their citizen and non-citizen children. Arizona – where police officers were given discretion to stop persons who “look” undocumented under SB 1070 (49th Leg, AZ 2010) (Hardy et al., 2012) – and Alabama – where children attending public schools needed to report their parents’ citizenship/legal status under HB 56 (AL Leg. 2011) – are the most egregious but not isolated cases. Georgia, Indiana, South Carolina, and Utah have enacted similar laws; and in 2011 the number of bills targeting immigrants introduced in state legislatures reached an all-time high of 1,592 (Hardy et al., 2012; NCSL, 2012). In addition, reflecting a major barrier experienced by all undocumented families but especially in rural areas in MN, only eleven states + DC provide driver’s licenses to undocumented immigrants (NCSL, 2015). Minnesota is not one of these eleven states. Because states and localities vary wildly in immigration enforcement, understanding how these differences affect parents’ ability to access children’s coverage and care is crucial.

States also vary greatly in the strength of their safety net and the availability of culturally- and linguistically-appropriate social and health care services, all important factors in increasing children’s Medicaid/CHIP enrollment (Kenney, Cook, & Dubay, 2009). Again, these factors may also help explain the differential role of parental

documentation status across states. Differences in state-level immigration policy, as mentioned earlier, have proven detrimental to immigrant health in general (Sanchez, Juarez, & Ybarra, 2014), and may prove even more important than health care policy in determining children's access to coverage. Future state-level analyses should take these into account. Future work in each of these areas would also benefit from a mixed methods approach such as that which I follow here. A lack of information about the effects of many of these policies would be aided by studies that are able to quantify and describe the magnitude of disparities across states, and a qualitative approach is absolutely necessary to understand the context and mechanisms through which disparities exist and persist. While I explored access to children's coverage and care in an "accessible" state, qualitative comparative work across states is needed in order to better understand the barriers and mechanisms through which the policy examined here (access to prenatal coverage), as well as the aforementioned policies, lead to higher levels of uninsurance for citizen children in undocumented families.

Finally, moving upstream to examine the origins of disparate state-level policy, as opposed to focusing on the consequences of such policies, is important in order to better understand what characteristics or conditions are present in states that do extend prenatal coverage, for example, compared to those that do not. Such information would help inform future policymaking and aid in crafting recommendations on political feasibility and potential obstacles for policymakers and advocates in states that are considering opening up this critical prenatal coverage.

Access to and quality of care

Finally, while my findings here reflected a focus on access to coverage and care, rather than an emphasis on the quality of care, parents shared many experiences that warrant further exploration. These include continuity of care, access to and the quality of interpreter services, and patient- and family-centered care, as well as the interpreter's role in patient- and family-centered care. Indeed, Latino children experience some of the greatest disparities in health care quality compared to their counterparts (AHRQ, 2014), and ultimately our attention to health insurance coverage and access to care is a means to the end of promoting children's health through quality services. In my postdoctoral research I plan to 1) examine access, utilization, and – most importantly – health care quality within the Medical Expenditure Panel Survey; 2) assess the relationship between healthcare quality and a variety of barriers for children in immigrant families through the California Health Interview Survey; and 3) conduct further qualitative work to incorporate patient and provider voices in order to begin to inform potential solutions for improving quality of care.

Conclusions

The bulk of research on coverage disparities for children of immigrants has focused on children's and parental *citizenship*. As expected and in line with previous research, noncitizen and undocumented experience the highest rates of uninsurance. However, examining parental *documentation* status – an often masked distinction – provides insight into lack of insurance generally and ESI specifically, and reveals further disparities. The degree of insurance and ESI followed a strong gradient where children

with undocumented parents experienced the most vulnerability and children with two citizen parents the least. The gap in ESI– which persisted after adjusting for several parental and family characteristics – appears to be the driving force behind these disparities. State-and local-level analyses provided a more complete picture of coverage disparities by children's citizenship and parental documentation status. When making decisions on coverage eligibility for the millions of immigrants excluded from ACA expansions and in considering immigration policies that shape undocumented immigrants' position in the labor market, federal and state policymakers must consider the direct and *indirect* impact of these policies in facilitating or restricting access for the *children* of immigrants as well.

BIBLIOGRAPHY

Abrego, L. J. (2011). Legal consciousness of undocumented Latinos: Fear and stigma as barriers to Claims- Making for First- and 1.5- Generation immigrants. *Law & Society Review, 45*(2), 337-370.

Acevedo-Garcia, D., & Stone, L. C. (2008). State variation in health insurance coverage for U.S. citizen children of immigrants. *Health Affairs (Project Hope), 27*(2), 434-446. doi:10.1377/hlthaff.27.2.434

Agency for Healthcare Research & Quality. (2014). 2013 National Healthcare Quality & Disparities Report. Rockville, MD: Agency for Healthcare Research & Quality, 2014. Retrieved from: http://www.ahrq.gov/research/findings/nhqrdr/nhqr13/2013highlights.pdf.

Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends. (2010a) 2009 Medical Expenditure Panel Survey-Insurance Component: Average total employee contribution (in dollars) per enrolled employee for family coverage at private-sector establishments that offer health insurance by firm size and selected characteristics: U.S., 2009. Rockville, MD: Agency for Healthcare Research & Quality. Retrieved from: http://meps.ahrq.gov/mepsweb/data_stats/summ_tables/insr/national/series_1/2009/tid2.pdf

Agency for Healthcare Research and Quality, Center for Financing, Access and Cost Trends. (2010b). 2009 Medical Expenditure Panel Survey-Insurance Component: Percent of private-sector establishments that offer health insurance by firm size and selected characteristics: U.S., 2009. Rockville, MD: Agency for Healthcare Research & Quality. Retrieved from: http://meps.ahrq.gov/mepsweb/data_stats/summ_tables/insr/national/series_1/2009/tia2.htm

Andridge, R. R., & Little, R. J. (2010). A review of hot deck imputation for survey non-response. *International Statistical Review, 78*(1), 40-64.

Aslanian, S. (2012, March 9). Hundreds of non-citizens in Minn. on edge over health cuts. *Minnesota Public Radio*. Retrieved from: http://www.mprnews.org/story/2012/03/09/emergency-medical-assistance-cuts.

Assistant Secretary of Planning & Evaluation, U.S. Department of Health & Human Services. (2009). Summary of Immigrant Restrictions Under Current Law. Washington DC: ASPE, DHHS. Retrieved from: http://aspe.hhs.gov/hsp/immigration/restrictions-sum.shtml.

Bachmeier, J. D., Van Hook, J., & Bean, F. D. (2014). Can we measure immigrants' legal status? Lessons from two US surveys. *International Migration Review, 48*(2), 538-566.

Baker, B. (2009). Estimates of the Resident Nonimmigrant Population in the United States. Washington DC: Office of Immigration Statistics, Department of Homeland Security.

Bell, B. A., Morgan, G. B., Schoeneberger, J. A., Loudermilk, B. L., Kromrey, J. D., & Ferron, J. M. (2010). Dancing the sample size limbo with mixed models: How low can you go. Paper presented at the *SAS Global Forum,* 11-14.

BeLue, R., Miranda, P. Y., Elewonibi, B. R., & Hillemeier, M. M. (2014). The association of generation status and health insurance among U.S. children. *Pediatrics, 134*(2), 307-314. doi:10.1542/peds.2013-3337

Berk, M. L., & Schur, C. L. (2001). The effect of fear on access to care among undocumented latino immigrants. *Journal of Immigrant Health, 3*(3), 151-156.

Blewett, L. A., Davern, M., & Rodin, H. (2004). Covering kids: Variation in health insurance coverage trends by state, 1996–2002. *Health Affairs, 23*(6), 170-180.

Bloom, B., Jones, L.I., & Freeman, G. (2013). Summary health statistics for U.S. children: National health interview survey, 2010. *National Center for Health Statistics, Vital Health Stat, 10*(258).

Blumberg, L. J., Holahan, J., Hadley, J., & Nordahl, K. (2007). Setting a standard of affordability for health insurance coverage. *Health Affairs (Project Hope), 26*(4), w463-73. doi:hlthaff.26.4.w463 [pii]

Borjas, G. J. (2011). Poverty and program participation among immigrant children. *The Future of Children / Center for the Future of Children, the David and Lucile Packard Foundation, 21*(1), 247-266.

Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology, 22*(6), 723.

Brown, E. R., Wyn, R., Yu, H., Valenzuela, A., & Dong, L. (1999). Access to health insurance and health care for children in immigrant families. *Children of Immigrants: Health, Adjustment, and Public Assistance*, 126-186.

Buchmueller, T. C., Lo Sasso, A. T., Lurie, I., & Dolfin, S. (2007). Immigrants and Employer- Sponsored health insurance. *Health Services Research, 42*(1p1), 286-310.

Bustamante, A. V., Fang, H., Garza, J., Carter-Pokras, O., Wallace, S. P., Rizzo, J. A., et al. (2012). Variations in healthcare access and utilization among Mexican immigrants: The role of documentation status. *Journal of Immigrant and Minority Health, 14*(1), 146-155.

Call, K. T., McAlpine, D. D., Garcia, C. M., Shippee, N., Beebe, T., Adeniyi, T. C., et al. (2014). Barriers to care in an ethnically diverse publicly insured population: Is health care reform enough? *Medical Care, 52*(8), 720-727. doi:10.1097/MLR.0000000000000172

Capps, R., Fix, M., Ost, J., Reardon-Anderson, J., & Passel, JS. (2005). The Health and Well-being of Young Children and Immigrants. Washington DC: Urban Institute.

Capps, R., Bachmeier, J. D., Fix, M., & Van Hook, J. (2013). A demographic, socioeconomic, and health coverage profile of unauthorized immigrants in the U.S. Washington, DC: Migration Policy Institute.

Capps, R., Chaudry, A., Pedroza, J. M., Castañeda, R. M., Santos, R., & Scott, M. M. (2014). US children with parents in deportation proceedings. *Immigrants and Minorities, Politics and Policy, 6*, 229-250.

Capps, R., & Fix, M. (2013). Immigration reform: A long road to citizenship and insurance coverage. *Health Affairs, 32*(4), 639.

Carle, A. C. (2009). Fitting multilevel models in complex survey data with design weights: Recommendations. *BMC Medical Research Methodology, 9*, (49), 1-13. doi:10.1186/1471-2288-9-49

Carrasquillo, O., Carrasquillo, A. I., & Shea, S. (2000). Health insurance coverage of immigrants living in the U.S.: Differences by citizenship status and country of origin. *American Journal of Public Health, 90*(6), 917-923.

Case, A., Fertig, A., & Paxson, C. (2005). The lasting impact of childhood health and circumstance. *Journal of Health Economics, 24*(2), 365-389.

Case, A., Fertig, A., & Paxson, C. (2005). The lasting impact of childhood health and circumstance. *Journal of Health Economics, 24*(2), 365-389.

Casey, M. M., Blewett, L. A., & Call, K. T. (2004). Providing health care to Latino immigrants: Community-based efforts in the rural Midwest. *American Journal of Public Health*, *94*(10), 1709-1711.

Castaneda, H. (2009). Illegality as risk factor: A survey of unauthorized migrant patients in a Berlin clinic. *Social Science and Medicine, 68*(8), 1552-1560.

Cavazos-Rehg, P. A., Zayas, L. H., & Spitznagel, E. L. (2007). Legal status, emotional well-being and subjective health status of latino immigrants. *Journal of the National Medical Association, 99*(10), 1126.

Centers for Medicare & Medicaid Services (CMS). (2014). The Health Insurance Marketplace: Information for Immigrant Families. Washington D.C.: CMS. Retrieved from: https://marketplace.cms.gov/technical-assistance-resources/training-materials/marketplace-for-immigrants-slides.pdf.

Center for Migration Studies. (2014). Estimates of the Unauthorized Population for States. Center for Migration Studies: New York, NY. Retrieved from: http://data.cmsny.org/

Congressional Budget Office. (2007). The impact of unauthorized immigrants on the budgets of state and local governments. Washington DC: Government Printing Office.

Corman, H., & Grossman, M. (1985). Determinants of neonatal mortality rates in the US: A reduced form model. *Journal of Health Economics, 4*(3), 213-236.

Costello, E. J., Pescosolido, B. A., Angold, A., & Burns, B. J. (1998). A family network-based model of access to child mental health services. *Research in Community and Mental Health, 9*, 165-190.

Creswell, J., & Plano Clark, V. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches* Sage Publications, Inc.

Cristancho, S., Garces, D. M., Peters, K. E., & Mueller, B. C. (2008). Listening to rural Hispanic immigrants in the Midwest: A community-based participatory assessment of major barriers to health care access and use. *Qualitative Health Research, 18*(5), 633-646. doi:10.1177/1049732308316669

Dunkwa-Mullan, I., Rhee, K. B., Stoff, D.M., Pohlhaus, J.R., & Sy, F. S. (2010). Moving toward paradigm-shifting research in health disparities through translational, transformational, and transdisciplinary approaches. *American Journal of Public Health, 100*(S1), S19.

Davidoff, A., Dubay, L., Kenney, G., & Yemane, A. (2003). The effect of parents' insurance coverage on access to care for low-income children. *Inquiry : A Journal of Medical Care Organization, Provision and Financing, 40*(3), 254-268.

De Genova, N. (2005). *Working the boundaries: Race, space, and "illegality" in Mexican Chicago.* Durham, NC: Duke University Press.

Derose, K. P., Escarce, J. J., & Lurie, N. (2007). Immigrants and health care: Sources of vulnerability. *Health Affairs, 26*(5), 1258.

DiJulio, B., Firth, J., Levitt, L., Claxton, G., Garfield, R., & Brodie, M. (2014). Where are California's Uninsured Now? Wave 2 of the Kaiser Family Foundation California Longitudinal Panel Survey. Menlo Park, CA: Kaiser Family Foundation. Retrieved from: http://kff.org/health-reform/report/where-are-californias-uninsured-now-wave-2-of-the-kaiser-family-foundation-california-longitudinal-panel-survey/.

Dollfus, C., Patetta, M., Siegel, E., & Cross, A. W. (1990). Infant mortality: A practical approach to the analysis of the leading causes of death and risk factors. *Pediatrics, 86*(2), 176-183.

Dubay, L., Kenney, G., & Haley, J. (2002). Children's participation in Medicaid and SCHIP: Early in the SCHIP era. Washington DC: Urban Institute:

Dubay, L., Holahan, J., & Cook, A. (2007). The uninsured and the affordability of health insurance coverage. *Health Affairs (Project Hope), 26*(1), w22-30. doi:hlthaff.26.1.w22 [pii]

Durden, T. E. (2007). Usual source of health care among Hispanic children: The implications of immigration. *Medical Care, 45*(8), 753-760. doi:10.1097/MLR.0b013e318054688e

Edelstein, B. L., & Chinn, C. H. (2009). Update on disparities in oral health and access to dental care for America's children. *Academic Pediatrics, 9*(6), 415-419.

Fassin, D. (2004). Social illegitimacy as a foundation of health inequality: How the political treatment of immigrants illuminates a French paradox. In A. Castro and M. Singer (Eds.), *Unhealthy Health Policy: A critical anthropological examination* (203-214). Walnut Creek, CA: AltaMira.

Field, P. A., & Morse, J. M. (1985). *Nursing research: The application of qualitative approaches* London: Croom Helm.

Finkelstein, J. A., Brown, R. W., Schneider, L. C., Weiss, S. T., Quintana, J. M., Goldmann, D. A., et al. (1995). Quality of care for preschool children with asthma: The role of social factors and practice setting. *Pediatrics, 95*(3), 389-394.

Fix, M., & Zimmermann, W. (2001). All under one roof: Mixed-status families in an era of reform. *International Migration Review, 354*(2), 397-419.

Flores, G., Abreu, M., & Tomany-Korman, S. C. (2006). Why are Latinos the most uninsured racial/ethnic group of US children? A community-based study of risk factors for and consequences of being an uninsured Latino child. *Pediatrics, 118*(3), e730-e740.

Flores, G., Fuentes-Afflick, E., Barbot, O., Carter-Pokras, O., Claudio, L., Lara, M., et al. (2002). The health of Latino children. *JAMA: The Journal of the American Medical Association, 288*(1), 82-90.

Flores, G., & Tomany-Korman, S. C. (2008). Racial and ethnic disparities in medical and dental health, access to care, and use of services in US children. *Pediatrics, 121*(2), e286-e298.

Flores, G., Abreu, M., Brown, V., & Tomany-Korman, S. C. (2005). How medicaid and the state children's health insurance program can do a better job of insuring uninsured children: The perspectives of parents of uninsured Latino children. *Ambulatory Pediatrics, 5*(6), 332-340.

Flores, G., Rabke-Verani, J., Pine, W., & Sabharwal, A. (2002). The importance of cultural and linguistic issues in the emergency care of children. *Pediatric Emergency Care, 18*(4), 271-284.

Forrest, C. B., & Riley, A. W. (2004). Childhood origins of adult health: A basis for life-course health policy. *Health Affairs, 23*(5), 155-164.

Fortuny, K., & Chaudry, A. (2012). ASPE Issue Brief: Overview of Immigrants' Eligibility for SNAP, TANF, Medicaid, and CHIP. Washington DC: ASPE, DHHS. Retrieved from: http://aspe.hhs.gov/hsp/11/immigrantaccess/eligibility/ib.shtml.

Fried, B., Pintor, J. K., Graven, P., & Blewett, L. A. (2014). Implementing federal health reform in the states: Who is included and excluded and what are their characteristics? *Health Services Research, 49*(S2), 2062-2085.

Fry, R., & Passel, J. S. (2009). Latino children: A majority are US-born offspring of immigrants. Washington DC: Pew Hispanic Center.

Ghulmiyyah, L., & Sibai, B. (2012). Maternal mortality from preeclampsia/eclampsia. Paper presented at the *Seminars in Perinatology, 36*(1), 56-59.

Goldstein, I. M., Kostova, D., Foltz, J. L., & Kenney, G. M. (2014). The impact of recent CHIP eligibility expansions on children's insurance coverage, 2008-12. *Health Affairs (Project Hope), 33*(10), 1861-1867. doi:10.1377/hlthaff.2014.0208

Gonzales, R. G., Terriquez, V., & Ruszczyk, S. P. (2014). Becoming DACAmented assessing the short-term benefits of deferred action for childhood arrivals (DACA). *American Behavioral Scientist, 58*(14), 1852-1872.

Gonzalez-Barrera, A., & Lopez, M. H. (2013). A demographic portrait of Mexican-origin Hispanics in the U.S. Washington, DC: Pew Hispanic Center.

Graefe, D. R. (no date). Gaps in Health Insurance Coverage among Mexican Immigrant Children: How Much Does Legal Status Matter? (Conference paper).

Grit, K., den Otter, J.J., & Spreij, A. (2012). Access to health care for undocumented migrants: A comparative policy analysis of England and the Netherlands. *Journal of Health Politics, Policy and Law, 37*(1), 37-67.

Guendelman, S., Angulo, V., Wier, M., & Oman, D. (2005). Overcoming the odds: Access to care for immigrant children in working poor families in California. *Maternal and Child Health Journal, 9*(4), 351-362.

Halfon, N., DuPlessis, H., & Inkelas, M. (2007). Transforming the US child health system. *Health Affairs, 26*(2), 315-330.

Halfon, N., & Hochstein, M. (2002). Life course health development: An integrated framework for developing health, policy, and research. *Milbank Quarterly, 80*(3), 433-479.

Halfon, N., Inkelas, M., & Wood, D. (1995). Nonfinancial barriers to care for children and youth. *Annual Review of Public Health, 16*(1), 447-472.

Halfon, N., Wood, D. L., Valdez, R. B., Pereyra, M., & Duan, N. (1997). Medicaid enrollment and health services access by Latino children in inner-city Los Angeles. *JAMA: The Journal of the American Medical Association, 277*(8), 636-641.

Hardy, L. J., Getrich, C. M., Quezada, J. C., Guay, A., Michalowski, R. J., & Henley, E. (2012). A call for further research on the impact of state-level immigration policies on public health. *American Journal of Public Health, 102*(7), 1250-1253.

Hausman, J., & McFadden, D. (1984). Specification tests for the multinomial logit model. *Econometrica: Journal of the Econometric Society, 52*(5), 1219-1240.

Holahan, J., & Spillman, B. (2002). *Health care access for uninsured adults: A strong safety net is not the same as insurance.* Washington DC: Urban Institute.

Holcomb, P. A., Tumlin, K., Koralek, R., Capps, R., & Zuberi, A. (2003). The application process for TANF, food stamps, Medicaid and SCHIP. *Issues for Agencies and Applicants and Limited English Speakers*.

Howell, E. M., & Kenney, G. M. (2012). The impact of the Medicaid/CHIP expansions on children: A synthesis of the evidence. *Medical Care Research and Review : MCRR, 69*(4), 372-396. doi:10.1177/1077558712437245

Huang, Z. J., Yu, S. M., & Ledsky, R. (2006). Health status and health service access and use among children in US immigrant families. *American Journal of Public Health, 96*(4), 634.

Illegal Immigration Reform and Immigrant Responsibility Act of 1996 (IIRIRA), Pub L No. 104-208, 100 Stat 3009.

Immigration and Nationality Act of 1952, Pub L No. 82-414, 66 Stat 163.

Immigrant Children's Health Improvement Act of 2009, H.R. 319, 111th Cong. (2009).

Immigration Reform and Control Act of 1986 (IRCA), Public Law 99-603.

Jeffereys, K., & Monger, R. (2008). U.S. Legal Permanent Residents: 2007. Washington DC: Office of Immigration Statistics, Department of Homeland Security. Retrieved from: http://www.dhs.gov/xlibrary/assets/statistics/publications/LPR_FR_2007.pdf.

Judson, D. H., & Swanson, D. A. (2011). Estimating characteristics of the foreign born by legal status: An evaluation of data and methods. *Estimating Characteristics of the Foreign-Born by Legal Status,* 1-50.

Kaiser Commission on Medicaid and the Uninsured. (2012). Key facts on health coverage for low-income immigrants today and under health reform. Washington DC: Kaiser Family Foundation.

Kaiser Commission on Medicaid and the Uninsured. (2009). New option for states to provide federally funded Medicaid and CHIP Coverage to additional immigrant children and pregnant women. Washington DC: Kaiser Family Foundation. Retrieved from: http://www.kff.org/medicaid/upload/7933.pdf.

Karaca- Mandic, P., Norton, E. C., & Dowd, B. (2010). Interaction terms in nonlinear models. *Health Services Research, 47*(1), 255-274.

Kempe, A., Beaty, B. L., Crane, L. A., Stokstad, J., Barrow, J., Belman, S., et al. (2005). Changes in access, utilization, and quality of care after enrollment into a state child health insurance plan. Commentary. *Pediatrics, 115*(2), 492-494.

Kenney, G.M. (2015). The Children's Health Insurance Program and the Family Glitch: Implications for Coverage and Affordability. Washington DC: The Urban Institute.

Kenney, G.M., Cook, A., & Dubay, L. (2009). Progress Enrolling Children in Medicaid/ CHIP: Who is Left and What are the Prospects for Covering More Children? Washington DC: The Urban Institute. Retrieved from: http://www.urban.org/sites/default/files/alfresco/publication-pdfs/411981-Progress-Enrolling-Children-in-Medicaid-CHIP-Who-is-Left-and-What-are-the-Prospects-for-Covering-More-Children-Updated--.PDF.

Ku, L., & Matani, S. (2001). Left out: Immigrants' access to health care and insurance. *Health Affairs, 20*(1), 247.

Landale, N. S., Hardie, J. H., Oropesa, R. S., & Hillemeier, M. M. (2015). Behavioral functioning among Mexican-origin children: Does parental legal status matter? *Journal of Health and Social Behavior, 56*(1), 2-18. doi:10.1177/0022146514567896

Langellier, B. A., Chen, J., Vargas-Bustamante, A., Inkelas, M., & Ortega, A. N. (2014). Understanding health-care access and utilization disparities among Latino children in the U.S. *Journal of Child Health Care : For Professionals Working with Children in the Hospital and Community,* doi:1367493514555587

Larchanche, S. (2011). Intangible obstacles: Health implications of stigmatization, structural violence, and fear among undocumented immigrants in France. *Social Science & Medicine, 74*(6), 858-63.

Lessard, G., & Ku, L. (2003). Gaps in coverage for children in immigrant families. *The Future of Children*, 101-115.

Lincoln, Y. S., & Guba, E. G. (1985). Establishing trustworthiness. *Naturalistic Inquiry, 289*, 331.

Lowe, L. (1998). *Immigrant acts: On Asian American cultural politics.* Duke University Press: Durham, NC.

Lu, M. C., Lin, Y. G., Prietto, N. M., & Garite, T. J. (2000). Elimination of public funding of prenatal care for undocumented immigrants in California: A cost/benefit analysis. *American Journal of Obstetrics and Gynecology, 182*(1), 233-239.

Lurie, I. Z. (2008). Welfare reform and the decline in the health-insurance coverage of children of non-permanent residents. *Journal of Health Economics, 27*(3), 786-793.

Lyon, B. (2003). When more security equals less workplace safety: Reconsidering US laws that disadvantage unauthorized workers. *University of Pennsylvania Journal of Labor & Employment Law., 6*, 571.

MacDougall, C., & Fudge, E. (2001). Planning and recruiting the sample for focus groups and in-depth interviews. *Qualitative Health Research, 11*(1), 117-126.

Massey, D. S. (2003). Patterns and processes of international migration in the 21st century. Paper presented at the *Conference on African Migration in Comparative Perspective, Johannesburg, South Africa, 4*(7).

Massey, D. S., Durand, J., & Pren, K. A. (2014). Explaining undocumented migration to the US. *International Migration Review, 48*(4), 1028-1061.

McGuire, S., & Georges, J. (2003). Undocumentedness and liminality as health variables. *Advances in Nursing Science, 26*(3), 185-195.

Mechanic, D. (1964). The influence of mothers on their children's health attitudes and behavior. *Pediatrics, 33*, 444-453.

Messias, D. K. H., McEwen, M. M., & Clark, L. (2015). The impact and implications of undocumented immigration on individual and collective health in the U.S. *Nursing Outlook, 63*(1), 86-94.

Mettler, S., & Soss, J. (2004). The consequences of public policy for democratic citizenship: Bridging policy studies and mass politics. *Perspectives on Politics, 2*(01), 55-73.

Minnesota Department of Human Services. (2015). Health Care Coverage for People

Who Are Noncitizens. St. Paul, MN: MNDHS. Retrieved from: http://mn.gov/dhs/people-we-serve/adults/health-care/health-care-programs/programs-and-services/noncitizens.jsp.

Monger, R., & Yankay, J. (2012). U.S. Legal Permanent Residents: 2011. Washington DC: Office of Immigration Statistics, Department of Homeland Security. Retrieved from: www.**dhs**.gov/xlibrary/assets/statistics/publications/lpr_fr_2011.pdf.

Moore, J. C., Stinson, L. L., & Welniak, E. J. (2000). Income measurement error in surveys: A review. *Journal of Official Statistics-Stockholm, 16*(4), 331-362.

Morgan, D. L. (2007). Paradigms lost and pragmatism regained methodological implications of combining qualitative and quantitative methods. *Journal of Mixed Methods Research, 1*(1), 48-76.

Mullan, F. (2005). Immigration pediatrics. *Health Affairs, 24*(6), 1619.

National Council of State Legislatures (NCSL). (2012). State laws related to immigration and immigrants. Retrieved from: http://www.ncsl.org/default.aspx?tabid=19897.

Newacheck, P. W., Stoddard, J. J., Hughes, D. C., & Pearl, M. (1998). Health insurance and access to primary care for children. *New England Journal of Medicine, 338*(8), 513-519.

Newton, L. (2005). 'It is not a question of being anti-immigration': Categories of deservedness in immigration policy making. *Deserving and Entitled: Social Constructions and Public Policy*, 139-167.

Ojeda, V. D., & Brown, E. R. (2005). Mind the gap: Parents' citizenship as predictor of Latino children's health insurance. *Journal of Health Care for the Poor and Underserved, 16*(3), 555-575.

Oropesa, R., Landale, N. S., & Hillemeier, M. M. (2015). Family legal status and health: Measurement dilemmas in studies of Mexican-origin children. *Social Science & Medicine,*

Park, L. S. (2011). *Entitled to nothing: The struggle for immigrant health care in the age of welfare reform.* New York, NY: NYU Press.

Passel, J. S. (2011). Demography of immigrant youth: Past, present, and future. *The Future of Children, 21*(1).

Passel, J.S. & Cohn, V. (2009). A Portrait of Unauthorized Immigrants in the U.S. Washington DC: Pew Hispanic Center.

Passel, J.S., Van Hook, J., & Bean, F.D. (2004). Estimates of legal and unauthorized foreign-born population for the U.S. and selected states, based on Census 2000. Alexandria,VA: Sabre Systems, Inc.

Patient Protection and Affordable Care Act of 2010 (PPACA), Pub L No. 111-148, 124 Stat 119-124, Stat 1025.

Patton, M. Q. (2002). *Qualitative research and evaluation methods.* Thousand Oaks, CA: Sage Publications, Inc.

Perreira, K. M., & Ornelas, I. J. (2011). The physical and psychological well-being of immigrant children. *The Future of Children / Center for the Future of Children, the David and Lucile Packard Foundation, 21*(1), 195-218.

Personal Responsibility & Work Opportunity Reconciliation Act of 1996 (PRWORA), Pub L No. 104-193, 110 Stat 2260.

Pew Hispanic Center. (2012). Population Distribution of Hispanic Origin Groups, by County. Washington DC. Retrieved from: http://www.pewhispanic.org/2012/09/06/population-distribution-of-hispanic-origin-groups-by-county/.

Ponce, N., Lavarreda, S. A., & Cabezas, L. (2011). The impact of health care reform on California's children in immigrant families. Los Angeles, CA: UCLA Center for Health Policy Research.

Prentice, J. C., Pebley, A. R., & Sastry, N. (2005). Immigration status and health insurance coverage: Who gains? who loses?. *American Journal of Public Health, 95*(1), 109-116.

Primo, D. M., Jacobsmeier, M. L., & Milyo, J. (2007). Estimating the impact of state policies and institutions with mixed-level data. *State Politics & Policy Quarterly, 7*(4), 446-459.

Raymond-Flesch, M., Siemons, R., Pourat, N., Jacobs, K., & Brindis, C. D. (2014). There is no help out there and if there is, it's really hard to find": A qualitative study of the health concerns and health care access of Latino "DREAMers. *Journal of Adolescent Health, 55*(3), 323-328.

Riemen, D. (1986). The essential structure of a caring interaction: Doing phenomenology. *Nursing Research: A Qualitative Perspective* , 85-105.

Ruffin, J. (2010). The science of eliminating health disparities: Embracing a new paradigm. *American Journal of Public Health, 100 Suppl 1*, S8-9. doi:10.2105/AJPH.2010.191957

Ruiz-Casares, M., Rousseau, C., Derluyn, I., Watters, C., & Crepeau, F. (2010). Right and access to healthcare for undocumented children: Addressing the gap between international conventions and disparate implementations in North America and Europe. *Social Science & Medicine, 70*(2), 329-336.

Rytina, N. (2012). Estimates of the Legal Permanent Resident Population in 2011. Washington DC: Office of Immigration Statistics, Department of Homeland Security. Retrieved from: www.dhs.gov/xlibrary/assets/statistics/.../ois_lpr_pe_2011.pdf.

Saldaña, J. (2012). *The coding manual for qualitative researchers.* Thousand Oaks, CA: Sage.

Saumure, K., & Given, L. (2008). Data Saturation. In Lisa M. Given (Ed.), *The Sage Encyclopedia of Qualitative Research Methods.* (pp. 196-197). Thousand Oaks, CA: SAGE Publications, Inc.

Sanchez, G., Juarez, M., & Ybarra, V. (2014). The Impact of Social-Political Environment on the Health of Latinos.

Santerre, R. E., & Neun, S. P. (2010). *Health economics: Theories, insights, and industry studies*. Mason, OH: Cengage Learning.

Schneider, A., & Ingram, H. (1993). Social construction of target populations: Implications for politics and policy. *American Political Science Review, 87*(02), 334-347.

Schur, C. L., Feldman, J. J., & Fund, C. (2001). *Running in place: How job characteristics, immigrant status, and family structure keep Hispanics uninsured* Commonwealth Fund, Task Force on the Future of Health Insurance New York, NY.

Schwartz, S., Chester, A., Lopez, S., & Vargas Poppe, S. (2014). Hispanic Children's Coverage: Steady Progress, But Disparities Remain. Washington DC: Georgetown University and National Council of La Raza. Retrieved from: http://ccf.georgetown.edu/wpcontent/uploads/2014/11/HispanicChildrensCoverage.pdf

Seiber, E. E. (2013). Which states enroll their Medicaid- Eligible, citizen children with immigrant parents? *Health Services Research, 48*(2pt1), 519-538.

Seiber, E. E. (2014). Covering the remaining uninsured children: Almost half of uninsured children live in immigrant families. *Medical Care, 52*(3), 202-207. doi:10.1097/MLR.0000000000000039

Seid, M., Varni, J. W., Cummings, L., & Schonlau, M. (2006). The impact of realized access to care on health-related quality of life: A two-year prospective cohort study of children in the California state Children's health insurance program. *The Journal of Pediatrics, 149*(3), 354-361.

Selden, T. M., & Hudson, J. L. (2006). Access to care and utilization among children: Estimating the effects of public and private coverage. *Medical Care, 44*(5 Suppl), I19-26. doi:10.1097/01.mlr.0000208137.46917.3b

Smith, J. C., & Medalia, C. (2014). *Health insurance coverage in the U.S.: 2013* US Department of Commerce, Economics and Statistics Administration, Bureau of the Census.

State Health Access Data Assistance Center. Data Center Web page. (2012). Data Center. Retrieved from: http://www.shadac.org/datacenter.

State Health Access Data Assistance Center. (2012). Defining "Family" for Studies of Health Insurance Coverage, Issue Brief #27. Minneapolis, MN: University of Minnesota. Retrieved from: http://www.shadac.org/files/shadac/publications/SHADAC_Brief27.pdf

Stevens, G. D., West-Wright, C. N., & Tsai, K. (2010). Health insurance and access to care for families with young children in California, 2001–2005: Differences by immigration status. *Journal of Immigrant and Minority Health, 12*(3), 273-281.

A. Schneider & H. Ingram (Eds.) (2005). *Deserving and entitled: Social constructions and public policy*. Albany, NY: SUNY Press.

Suárez-Orozco, C., Yoshikawa, H., Teranishi, R., & Suárez-Orozco, M. (2011). Growing up in the shadows: The developmental implications of unauthorized status. *Harvard Educational Review, 81*(3), 438-473.

Szilagyi, P. G., Dick, A. W., Klein, J. D., Shone, L. P., Zwanziger, J., & McInerny, T. (2004). Improved access and quality of care after enrollment in the New York state children's health insurance program (SCHIP). *Pediatrics, 113*(5), e395-e404.

Taylor, P., Lopez, M.H., Martinez, J., & Velasco, G. (2012). When Labels Don't Fit: Hispanics and Their Views of Identity. Washington DC: Pew Hispanic Center. Retrieved from: http://www.pewhispanic.org/2012/04/04/when-labels-dont-fit-hispanics-and-their-views-of-identity/.

Tashakkori, A., & Teddlie, C. (Eds.) (2010). *Sage handbook of mixed methods in social & behavioral research.* Thousand Oaks, CA: Sage.

Teddlie, C., & Yu, F. (2007). Mixed methods sampling. *Journal of Mixed Methods Research, 1*(1), 77-100.

U.S. Department of Health & Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. (2014). The Health and Well-being of Children: A Portrait of States and the Nation, 2011-2012. Rockville, MD: DHHS. Retrieved from: http://mchb.hrsa.gov/nsch/2011-12/health/child/childs-health-care/current-health-insurance.html.

Viladrich, A. (2012). Beyond welfare reform: Reframing undocumented immigrants' entitlement to health care in the U.S., a critical review. *Social Science & Medicine, 74*(6), 822-829.

Villar, A. (2008). Response Bias. In Paul J. Lavrakas (Ed.), *Encyclopedia of Survey Research Methods.* (pp. 752-754). Thousand Oaks, CA: Sage Publications, Inc.

Wallace, S. P., Torres, J., Sadegh-Nobari, T., Pourat, N., & Brown, E. R. (2012). Undocumented immigrants and health care reform: Final Report to the Commonwealth Fund. Los Angeles, CA: UCLA Center for Health Policy Research.

Walls, C. A., Rhodes, K. V., & Kennedy, J. J. (2002). The emergency department as usual source of medical care: Estimates from the 1998 national health interview survey. *Academic Emergency Medicine, 9*(11), 1140-1145.

Weathers, A. C., Minkovitz, C. S., Diener-West, M., & O'Campo, P. (2008). The effect of parental immigration authorization on health insurance coverage for migrant Latino children. *Journal of Immigrant and Minority Health, 10*(3), 247-254.

Willen, S. S. (2012). How is health-related "deservingness" reckoned? Perspectives from unauthorized im/migrants in Tel Sviv. *Social Science & Medicine, 74*(6), 812-821.

Yoshikawa, H. (2011). *Immigrants raising citizens: Undocumented parents and their children.* New York, NY: Russell Sage Foundation.

Yu, S. M., Huang, Z. J., & Kogan, M. D. (2008). State-level health care access and use among children in US immigrant families. *American Journal of Public Health, 98*(11), 1996-2003. doi:10.2105/AJPH.2007.117911

Yun, K., Fuentes-Afflick, E., Curry, L. A., Krumholz, H. M., & Desai, M. M. (2013). Parental immigration status is associated with children's health care utilization: Findings from the 2003 new immigrant survey of US legal permanent residents. *Maternal and Child Health Journal, 17*(10), 1913-1921.

Zallman, L., Wilson, F. A., Stimpson, J. P., Bearse, A., Arsenault, L., Dube, B., et al. (2015). Unauthorized immigrants prolong the life of Medicare's trust fund. *Journal of General Internal Medicine.* doi: 10.1007/s11606-015-3418-z

Ziol- Guest, K. M., & Kalil, A. (2012). Health and medical care among the children of immigrants. *Child Development, 83*(5), 1494-1500.

APPENDICES

Appendix A: University of Minnesota IRB Approval

UNIVERSITY OF MINNESOTA

Twin Cities Campus

Division of Health Policy and Management
School of Public Health

For U.S. Mail:
Mayo Mail Code 729
420 Delaware Street S.E.
Minneapolis, MN 55455

For Courier/Deliver Service:
516 Delaware Street S.E., 15-200 PWB
Minneapolis, MN 55455

Fax: 612-624-2196
http://www.hpm.umn.edu

July 12, 2013

To: University of Minnesota Institutional Review Board
From: Jessie Pintor
RE: 1303P29442

I am writing in response to the stipulations outlined by the Human Subjects Committee regarding my study, "Latino children at the intersection of immigration and health care policy: A mixed methods study of parental documentation status, state-level policy, and access to coverage and care."

In response to the following concerns:

1. *Please submit a recruitment script that will be used when recruiting key informants*: I have attached a recruitment script that will be used to recruit key informants.

2. *In regards to your recruitment process the committee noted that subjects' providing their phone number to the community liaison in order for you to call them creates a link to identifiers which you are working hard to avoid. The committee determined that this procedure should not be implemented. Confirm your understanding of this stipulation*. To address these concerns and avoid a potential link to identifiers, I will not request that potential subjects' provide their phone number to the community liaison in order for me to call them. Instead, in line with other alternatives I outlined in my application, I will give potential subjects' the option of calling me to set up the interview or have the community liaison coordinate the interview time and location for us. I have deleted the line from my community liaisons' recruitment script that tells potential subjects that they may provide their phone number in order for me to contact them directly.

3. *The committee determined that in regards to minimizing the costs of participating in the research by providing childcare that the childcare should not be provided by research study staff but rather it would be more appropriate to offer money for the compensation of childcare costs. Confirm your understanding of this*: Research study staff will not provide childcare, rather the $30 Target gift card compensation will be provided to minimize costs incurred by subjects for completing the interview, including childcare.

4. *Please assure the committee that you have considered your safety when conducting interviews in subjects' homes*: I have considered and will consider my safety when conducting interviews in subjects' homes.

Thank you for your thoughtful review of my proposed study. I look forward to initiating my study following final approval from the IRB.

Sincerely,

Jessie Kemmick Pintor, MPH

UNIVERSITY OF MINNESOTA

Twin Cities Campus

Human Research Protection Program
Office of the Vice President for Research

D528 Mayo Memorial Building
420 Delaware Street S.E.
MMC 820
Minneapolis, MN 55455

Office: 612-626-5654
Fax: 612-626-6061
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Website: http://research.umn.edu/subjects/

July 23, 2013

Jessie B Pintor
5140 Weaver Densford Hall
308 Harvard St SE
Minneapolis, MN 55455

RE: "Latino children at the intersection of immigration and health care policy: A mixed methods study of parental documentation status, state-level policy, and access to coverage and care"
IRB Code Number: **1303P29442**

Dear Ms. Pintor

The Institutional Review Board (IRB) received your response to its stipulations. Since this information satisfies the federal criteria for approval at 45CFR46.111 and the requirements set by the IRB, final approval for the project is noted in our files. Upon receipt of this letter, you may begin your research.

IRB approval of this study includes the parent and key informant consent forms received March 6, 2013 and the recruitment script received July 17, 2013 are approved.

The IRB would like to stress that subjects who go through the consent process are considered enrolled participants and are counted toward the total number of subjects, even if they have no further participation in the study. Please keep this in mind when calculating the number of subjects you request. This study is currently approved for 20 subjects. If you desire an increase in the number of approved subjects, you will need to make a formal request to the IRB.

For your records and for grant certification purposes, the approval date for the referenced project is April 12, 2013 and the Assurance of Compliance number is FWA00000312 (Fairview Health Systems Research FWA00000325, Gillette Children's Specialty Healthcare FWA00004003). Research projects are subject to continuing review and renewal; approval will expire one year from that date. You will receive a report form two months before the expiration date. If you would like us to send certification of approval to a funding agency, please tell us the name and address of your contact person at the agency.

As Principal Investigator of this project, you are required by federal regulations to:
*Inform the IRB of any proposed changes in your research that will affect human subjects, changes should not be initiated until written IRB approval is received.
*Report to the IRB subject complaints and unanticipated problems involving risks to subjects or others as they occur.
*Inform the IRB immediately of results of inspections by any external regulatory agency (i.e. FDA).

*Respond to notices for continuing review prior to the study's expiration date.
*Cooperate with post-approval monitoring activities.

Information on the IRB process is available in the form of a guide for researchers entitled, What Every Researcher Needs to Know, found at http://www.research.umn.edu/irb/WERNK/index.cfm

The IRB wishes you success with this research. If you have questions, please call the IRB office at 612-626-5654.

Sincerely,

Jeffery Perkey, MLS, CIP
Research Compliance Supervisor
JP/bw

CC: Kathleen Call

Appendix B: Script for Community Liaison Recruiting Parents

"You are invited to participate in a research study that focuses on your experiences accessing health insurance coverage and health care services for your child(ren).You are being invited to participate in this study because you are a Latino immigrant with children 18 years of age or younger. Jessie Kemmick Pintor is conducting the research and she is a graduate student at the University of Minnesota seeking a degree from the School of Public Health. She hopes to interview approximately 20 Latino immigrant parents.

If you agree to participate, she would like to interview you for about an hour. You will be compensated for your participation.

This research study explores the experiences of Latino immigrant parents seeking health insurance coverage and health care services for their child(ren), with a focus on how immigrant parents with different documentation statuses navigate the health care system for their children. Ms. Pintor would like to interview about your own experiences enrolling your children in health insurance coverage through your or your partner's employer or in Medical Assistance, for example. She is also interested in your experiences seeking health care services for your children and how you feel you are treated in the health care system based on your documentation status. She would also like to ask about your own health insurance coverage and access to health care services and how your experiences seeking insurance coverage and health care services for yourself differ from your experiences seeking these for your children. The information you and other parents provide will be used to inform public policies to improve access to coverage and care for the children of immigrants and to inform social service/health care providers about the barriers Latino immigrants face in accessing coverage and care for their children.

Ms. Pintor has explained to me that any information you provide will be kept confidential, that she will not record any information that someone could use to identify you, and that information from the interviews will be saved in secure files protected with passwords. If you are interested in participating, I can give you Jessie's phone number for you to contact her directly ***or*** I can set up a time and place for you and Jessie to meet for the interview."

Appendix C: Recruitment Script: Key Community Informants

"You are invited to participate in a research study that focuses on the experiences of Latino immigrant parents accessing health insurance coverage and health care services for their child(ren).You are being invited to participate in this study because you work for a social service, health care, or state/local agency that serves Latino immigrant parents. I am graduate student at the University of Minnesota seeking a degree from the School of Public Health, and I am the sole investigator on this research project. I hope to interview approximately 10 key informants like yourself.

If you agree to participate, I would like to interview you for about an hour. You will be compensated for your participation.

This research study explores the experiences of Latino immigrant parents seeking health insurance coverage and health care services for their child(ren), with a focus on how immigrant parents with different documentation statuses navigate the health care system for their children. I would like to interview you about your thoughts and observations related to Latino immigrant parents' experiences enrolling their children in health insurance coverage through their or their partner's employer or in Medical Assistance, for example. I am also interested in their experiences seeking health care services for their children and how you feel they are treated in the health care system based on their documentation status. I would also like to ask about parents' own health insurance coverage and access to health care services and how their experiences seeking insurance coverage and health care services for themselves differ from their experiences seeking these for their children. The information you and other key informants provide will be used to inform public policies to improve access to coverage and care for the children of immigrants and to inform other social service/health care providers about the barriers Latino immigrants face in accessing coverage and care for their children.

Any information you provide will be kept confidential, I will not record any information that someone could use to identify you, and information from the interviews will be saved in secure files protected with passwords. If you are interested in participating, please contact me at [phone number] or [email] directly or I can call you if you provide your phone number (I will not share the phone number with anyone or connect it to the study if you decide to participate)."

Appendix D: Parent Interview Guide

Questions to be asked before beginning audio recording, but after discussing participant information sheet that outlines their voluntary participation throughout the interview, describes potential risks, and outlines protections for confidentiality:

NO IDENTIFYING INFORMATION WILL BE COLLECTED DURING AUDIO RECORDING

Introduction:
Bueno, vamos a empezar la entrevista, pero por ahora no voy a prender la grabadora. Yo le voy aviso antes de prenderla.

Durante esta entrevista, le voy a preguntar acerca de sus experiencias como mamá/papá al momento de buscar seguro médico y servicios médicos para sus hijos.

Como el enfoque de estas entrevistas son inmigrantes como Ud., me gustaría preguntarle acerca de su experiencia migrando hacia los EEUU, y por lo tanto podríamos tocar unos temas sensibles.

No olvide por favor que su participación es voluntaria y siempre tiene la opción de no contestar cualquiera de las preguntas o de detener la entrevista en cualquier momento.

Mantendré todas sus respuestas bajo máxima confidencialidad, como hablamos hace unos minutos.

Migration history:
Entonces, podría por favor compartir conmigo su experiencia migrando hacia los EU? Por ejemplo, en donde nació y en qué año vino para acá?

Desde que llegó a los EEUU se ha convertido en ciudadano? O ha podido conseguir su residencia?

Si vive con el papá/la mamá de sus hijos, podría contarme en donde nació y cuando vino? [Si no nació acá] Desde que llegó, se ha convertido en ciudadano? O ha podido conseguir su residencia?

Como mencione ahorita, estoy interesada en escuchar acerca de sus experiencias al momento de buscar seguro médico y servicios médicos para sus hijos, entonces podrías compartir por favor cuantos hijos tiene, que edad tienen, y en donde nacieron?

Está bien si ahora prendo la grabadora?

BEGIN AUDIO RECORDING NOW

Initiation (experiences accessing coverage/care):

- **Para empezar, alguna vez ha intentado conseguir seguro médico para sus hijos? Podría contarme acerca de esa experiencia?**
  - Tienen seguro médico? Qué clase de seguro médico? (Asistencia médica, seguro medico de un empleador?)

- **Ahora, me podría contar de alguna vez que Ud. tenía que buscar servicios médicos para sus hijos? Como lo hizo y cómo fue su experiencia?**
  - Como lo tratan en las clínicas u hospitales?
    - Como se siente/se sintió al respeto?

- **Otra cosa que me interesa escuchar está relacionado con el estatus migratorio.**
  - Su estatus migratorio ha influenciado de alguna forma sus experiencias al momento de buscar seguro médico y servicios médicos para sus hijos?
    - Por favor, me podría explicar como su estatus ha influenciado?
      - Como se sintió al respeto? Teniendo en cuenta esa experiencia, cual es la primera emoción o sentimiento que se le viene a la mente?
      - Que pensaba que hubiera pasado si le hubieran preguntado por o si supieran su estatus?

    OR
    - Me podría explicar por qué no ha afectado sus experiencias? Pensaba que su estatus iba a ser un factor importante?

  - Ud. cree que los que trabajan en las clínicas u hospitales consideran su estatus migratorio cuando está buscando servicios médicos para sus hijos?
  - Ud. siente que el personal de las clínicas u hospitales lo/la tratan igual o diferente que otros inmigrantes debido a su estatus?

  - Ud. cree que hay otras razones por las cuales las personas lo/la tratan diferente?

Interaction with public programs (knowledge and attitudes):

- [Si los hijos tienen MA]: **Podría por favor contarme de cualquier experiencia que ha tenido aplicando por la asistencia médica para sus hijos?**

- [Si los hijos no tienen MA]: **Ud. cree que su hijo es/sus hijos son elegible(s) para la asistencia médica?**
    - [si cree que si]: Alguna vez ha intentado conseguirla para ellos/ellas?

  - Ud. cree que se considera el estatus migratorio de los padres para determinar si el hijo es elegible para asistencia médica?

- o Su estatus migratorio ha influenciado de alguna forma su decisión de aplicar o no por la asistencia médica para sus hijos?
  - ▪ Por favor, me podría explicar como se ha influenciado?
    - Como se sintió al respeto? Teniendo en cuenta esa experiencia, cual es la primera emoción o sentimiento que se le viene a la mente?
    - Que pensaba que hubiera pasado si le preguntaran por o descubrieran su estatus migratorio?

  OR
  - ▪ Me podría explicar por qué no ha afectado sus experiencias? Pensaba que su estatus iba a ser un factor importante?

<u>Interaction with private health insurance coverage (knowledge and attitudes):</u>
Con las siguientes preguntas, quisiera saber sobre el acceso que ha tenido a un seguro médico en su trabajo.

Primero, Ud. tiene trabajo? Que tipo de trabajo hace? Por favor, no el nombre de la compañía.
Su pareja trabaja? Que tipo de trabajo hace? De nuevo, no me tiene que decir el nombre de la compañía.

- [Si los hijos tienen ESI]: **Podría por favor contarme de cualquier experiencia que ha tenido aplicando por un seguro médico en su trabajo (o en el de su pareja) para sí mismo o para sus hijos?**
- [Si los hijos no tienen ESI]: **En su trabajo (o en el de su pareja), ofrecen seguro medico?**
  - o [si cree que si]: Ud. sabe si es elegible/su pareja sería elegible para este seguro?
    - ▪ [si cree que si]: Ud. sabe si sus hijos serían elegibles?
      - [si cree que si]: Alguna vez ha intentado conseguir este seguro para Ud./para ellos?
        - o [Si no]: Por qué no ha intentado?

  - o Ud. cree que se considera el estatus migratorio para determinar si uno es elegible para el seguro médico?

  - o Su estatus migratorio ha influenciado de alguna forma su decisión de aplicar o no por este seguro médico?
    - ▪ Por favor, me podría explicar como se ha influenciado?

    OR
    - ▪ Me podría explicar por qué no ha afectado sus experiencias? Pensaba que su estatus iba a ser un factor importante?

<u>Influence of parents' own access to (or lack of) coverage and care:</u>

- **Me interesa escuchar mas sobre sus experiencias al momento de buscar seguro médico y servicios médicos para sí mismo.**
  - Tiene seguro médico/ha tenido alguna vez seguro médico? Qué clase de seguro médico? (Asistencia médica, seguro por parte de un empleador, otra clase?) Su pareja tiene/ha tenido seguro médico? Que clase?
  - Su estatus migratorio ha influenciado de alguna forma su decisión de aplicar o no por un seguro médico? O su decisión de buscar o no servicios médicos?
    - Por favor, me podría explicar como se ha influenciado?
      - Como se sintió al respeto? Teniendo en cuenta esa experiencia, cual es la primera emoción o sentimiento que se le viene a la mente?
      - Que pensaba que hubiera pasado si le preguntaran por o descubrieran su estatus migratorio?
    - Me podría explicar por qué no ha afectado sus experiencias? Pensaba que su estatus iba a ser un factor importante?

- **Como se comparan sus experiencias al momento de buscar seguro médico para sí mismo con las que ha tenido al buscar seguro médico para sus hijos?**
  - El hecho de que Ud. tiene/no tiene seguro médico ha afectado sus experiencias o ju capacidad de buscar seguro médico/servicios médicos para sus hijos?
    - Me podría describir como le ha afectado?

- **Y como se comparan sus experiencias al momento de buscar servicios médicos para sí mismo con las que ha tenido al buscar servicios médicos para sus hijos?**
  - Sus propias experiencias en el sistema de salud han afectado sus experiencias o su capacidad de buscar servicios médicos para sus hijos?
    - Me podría describir como le ha afectado?

Questions to be asked before beginning audio recording, but after discussing participant information sheet that outlines their voluntary participation throughout the interview, describes potential risks, and outlines protections for confidentiality:

NO IDENTIFYING INFORMATION WILL BE COLLECTED DURING AUDIO RECORDING

Introduction:

Okay, we are going to start the interview, but for now I'm not going to turn on the audio recorder. I will let you know before I turn it on.

During this interview, I will ask you about your experiences as a parent seeking health insurance and health care for your children.

Given the focus of these interviews on immigrants like yourself, I would like to ask you about and hear about your migration experience, which may include sensitive topics.

Please remember that your participation is voluntary and you may choose not to answer any question or stop the interview at any time.

I will maintain answers you provide under strict confidentiality, as we discussed a few minutes ago.

Migration history:

That being said, could you please share with me your experience immigrating to the U.S.? For example, where were you born and in what year did you come to the U.S

Since moving to the U.S. have you become a naturalized citizen? A legal permanent resident?

If you live with the father/mother of your children, could you please tell me whether they are: a US born citizen? A naturalized citizen? A legal permanent resident?

As I mentioned earlier, I am interested in hearing about your experiences seeking insurance and health care for your children, therefore could you please share with me how many children you have, how old they are, and where they were born?

Is it okay with you if I turn on the recorder now?

BEGIN AUDIO RECORDING NOW

<u>Initiation (experiences accessing coverage/care):</u>

- **To begin, have ever tried to get health insurance for your children? Could you please share a story about your experience seeking insurance for your child(ren)?**
    - Is (are) your child(ren) insured? What type of coverage does he/she have? Insurance through an employer? Medical Assistance? Other?
- **Now, could you please share a story about a time a when you needed to seek care for your child? How did you go about seeking this care? What was your experience like?**
    - How do (how do you think) clinic/hospital staff treat you?
        - Probe: How did the way they treated you make you feel?
- **One area that I am interested in hearing about is related to documentation status.**
    - Has your documentation status influenced at all how you seek health insurance /health care for your child/ren?
        - Could you please tell me how it has influenced your seeking insurance/care?
            - How did that make you feel? When you think about that situation now what is the first emotion that comes to mind?
            - What would you anticipate happening if they inquired about/knew your documentation status?

        OR
        - Could you please explain why it hasn't been an issue? Did you think it would matter?
    - Do you think that clinic/hospital staff take your documentation status into consideration when you are seeking care for your child(ren)?
    - Do you think that clinic/hospital staff treat you similarly or differently than other immigrants because of your status?
    - Do you think there are other things that make people treat you differently?

<u>Interaction with public programs (knowledge and attitudes):</u>

- [If child(ren) enrolled in Medicaid]: **Could you please describe for me any experiences you have had applying for Medical Assistance for your child(ren)?**
- [If child(ren) not enrolled in Medicaid]: **Do you think your child(ren) is (are) eligible for Medical Assistance?**
        - If so, have you tried to enroll them in Medical Assistance?

    - Do you think a parent's documentation status is considered for determining his/her child's eligibility for (Medical Assistance?

    - Has your documentation status influenced at all whether you have applied for Medical Assistance for your child?
        - Could you please tell me how it has influenced your seeking insurance/care?

- How did that make you feel? When you think about that situation now what is the first emotion that comes to mind?
- What would you anticipate happening if they inquired about/knew your documentation status?

OR

- Could you please explain why it hasn't been an issue? Did you think it would matter?

Interaction with private health insurance coverage (knowledge and attitudes):
For these next questions, I would like to ask you about your access to insurance through an employer.

First of all, do you have a job? What type of work do you do? Please only share the area you work in, not the name of your employer. Does your spouse/partner have a job? What type of work does he/she do? Again, please only share the area he/she works in, not the name of his/her employer.

- [If child(ren) enrolled in ESI]: **Could you please describe for me any experiences you have had applying for/enrolling in coverage for yourself and/or for your child(ren) through your (your spouse's/partner's) employer.**
- [If child(ren) not enrolled in ESI]: **Do you know if your employer or your spouse's employers offer health insurance to employees?**
  - [If they do]: Do you know if you are/would be (your partner is/would be eligible for this coverage?
    - [If eligible]: Do you know/think that your children are also eligible for this coverage?
      - [If so]: Have you tried to enroll them?
        - [If not]: Why haven't you enrolled them?
  - Do you think documentation status is considered for determining eligibility for insurance through your employer?
  - Has your documentation status influenced at all whether you have tried to apply for coverage through your (your spouse's) employer?
    - Could you please tell me how it has influenced your seeking insurance/care?

    OR

    - Could you please explain why it hasn't been an issue? Did you think it would matter?

Influence of parents' own access to (or lack of) coverage and care:

- **I am also interested in hearing about your experiences seeking health insurance and/or health care for yourself.**

- Do you have/have you had health insurance? If so, what type? (employer, Medicaid, other) Does your spouse/partner have insurance coverage? If so, what type?
- Has your documentation status influenced at all how you seek health insurance coverage/health care for yourself?
    - Could you please tell me how it has influenced your seeking insurance/care?
        - How did that make you feel? When you think about that situation now what is the first emotion that comes to mind?
        - What would you anticipate happening if they inquired about/knew your documentation status?

    OR

    - Could you please explain why it hasn't been an issue? Did you think it would matter?

- **How does the way you go about accessing coverage for yourself compare with how you access coverage for your child(ren)?**
    - Does (not) having health insurance coverage for yourself influence how you/your ability to access coverage and care for your child(ren)?
        - Could you please describe how it has affected this?

- **Does the way you go about accessing care for yourself compare with how you access care for your child(ren)?**
    - Do you think your own experiences accessing [attempting to access] care influence how you access care for your child(ren)?
        - Could you please describe how it has affected this?

Appendix E: Participant Information Sheets

Hoja Informativa para Participantes (Padres)
Para la Investigación:
"Parental Documentation Status, state policy, and coverage among Latino children"

Está invitada(o) a participar en un estudio que se enfoca en sus experiencias al momento de buscar seguro médico y servicios médicos para sus hijos. Está invitado(a) a participar en este estudio por ser un inmigrante Latino con hijos menores de 19 años. Mi nombre es Jessie Kemmick Pintor y soy una estudiante posgrado en la Universidad de Minnesota, y estoy estudiando con el fin de recibir un diploma de la escuela de salud pública. Estoy trabajando en este estudio con la ayuda de mi asesora, Kathleen Call, PhD. Espero entrevistar a aproximadamente 20 padres inmigrantes Latinos, más 10 "informantes" de la comunidad.

Si decide participar, me gustaría entrevistarlo(a). La entrevista durará una hora. Por favor, leer esta hoja y hacerme cualquier pregunta que tenga antes de decidir si va a participar.

¿De qué se trata este estudio?
Este estudio explora las experiencias de los padres inmigrantes Latinos al momento de buscar seguro médico y servicios médicos para sus hijos, enfocándose en como los padres inmigrantes con diferentes estatus migratorio se dirigen por el sistema de cuidado de salud por sus hijos. Quisiera entrevistarlo(a) acerca de sus propias experiencias al momento de inscribir a sus hijos en un seguro médico en su trabajo o en el de su pareja, o al aplicar por la Asistencia Médica para sus hijos, por ejemplo. También me interesan sus experiencias al buscar servicios de salud para sus hijos y como se siente que la(lo) tratan en el sistema de servicios médicos basado en su estatus migratorio. A parte me gustaría preguntarle acerca de su propio seguro médico y acceso a servicios de salud y como se comparan sus experiencias buscando seguro médico y servicios médicos para sí mismo con sus experiencias buscando estos servicios para sus hijos. La información que se dada por Ud. y otros padres se utilizará para informar a la política pública con el fin de mejorar el acceso a seguro médico y cuidado médicos para los hijos de los inmigrantes y para informarles a los proveedores de servicio social o servicios médicos acerca de las barreras que enfrentan los padres inmigrantes Latinos al navegar los seguros médicos y en el sistema de cuidado de salud.

¿Qué le pediría que haga?
Si decide participar en este estudio, la(o) voy a entrevistar por alrededor de una hora en una ubicación en la cual los/las dos estamos de acuerdo. Grabaría la entrevista en una grabadora digital de audio. Se puede negar a contestar cualquiera de las preguntas que le haga y puede detener la entrevista en cualquier momento.

¿Hay algún riesgo por participar en este proyecto?
Mantendré la información que Ud. provee siempre confidencial. No usaré su nombre verdadero en mis notas o en la grabación. Usaría un número en lugar de su nombre para identificar sus respuestas. Este número será incluido en la grabación y mis notas, pero no mantendré ningún record de su nombre vinculado con su número de identificación de este estudio. Cualquier información que provea durante la entrevista que podría ser usada para identificarlo(a) será borrada de la grabación. Las grabaciones digitales serán mantenidas en un servidor seguro en archivos digitales protegidos con contraseña. Voy a contratar a HACER (Hispanic Advocacy and Community Empowerment Research, una organización

dentro de la Universidad de Minnesota que tiene años de experiencia dedicados a la investigación comunitaria en la comunidad Latina de Minnesota) para escribir en computador las grabaciones de las entrevistas. Antes de compartir las grabaciones con HACER (la organización), borraría cualquier información que provee durante la entrevista que podría ser usada para identificarla(o). Las grabaciones serán completamente borradas una vez que no se necesiten para el estudio. Cualquier publicación que se haga acerca del estudio será escrito de tal forma que no puede ser identificado(a).

Aunque estoy haciendo los esfuerzos para minimizar el riesgo para Ud., hablaremos de unos asuntos importantes, pero sensibles, relacionado con su experiencia como inmigrante y su estatus migratorio, tanto como sus experiencias manejando el seguro médico y el sistema de cuidado de salud para su(s) hijo(s). Esto podría causar reacciones emocionales o hacerle sentir incómodo. Ud. puede detener la entrevista en cualquier momento o no responder a cualquiera de las preguntas. Si se pone seriamente incómodo, yo misma detendría la entrevista. Tengo una lista de recursos que puedo compartir para que obtenga apoyo de alguna agencia de servicio social.

Si hay alguna evidencia de abuso de niños proveída durante nuestra entrevista, mi obligación sería reportarlo bajo las leyes de protección de niños de Minnesota.

¿Hay algún beneficio por participar en este proyecto?
No se beneficiará personalmente por haber participado en esta entrevista.

¿Le pagaría por participar en este proyecto?
Recibirá una tarjeta de regalo de Target de $30.00 por participar en la entrevista.

¿Puede decidir si quiere o no participar en este estudio?
Su decisión de participar en este estudio es completamente voluntaria. Puede decidir en cualquier momento no participar o detener la entrevista. Su decisión no afectaría su relación con la Universidad de Minnesota.

¿Y si tiene preguntas acerca de este estudio?
Si tiene preguntas acerca de estudio, me las puede hacer ahora o me puede contactar al 612-229-8164 o a mi asesora, Kathleen Call, al 612-624-3922.

Si quiere hablar con alguien a parte de mi o mi asesora, Ud. podrá llamar a la Línea de Abogacía de los Sujetos de Investigación, D-528, 420 Delaware Street SE, Minneapolis, MN 55455; número de teléfono (612) 625-1650.

Si decide participar, le daría una copia de esta hoja.

Parent Participant Information Sheet
For the Research Project:
"Parental Documentation Status, state policy, and coverage among Latino children"

You are invited to participate in a research study that focuses on your experiences accessing health insurance coverage and health care services for your child(ren). You are being invited to participate in this study because you are a Latino immigrant with children under 18 years of age. My name is Jessie Kemmick Pintor and I am a graduate student at the University of Minnesota seeking a degree from the School of Public Health. I am conducting this research under the guidance of my adviser, Kathleen Call, PhD. I hope to interview approximately 20 Latino immigrant parents, and 10 key community informants who work with Latino immigrant parents.

If you agree to participate, I would like to interview you for about an hour. Please read this form and ask me any questions you have about this study before agreeing to participate.

What is this research study about?

This research study explores the experiences of Latino immigrant parents seeking health insurance coverage and health care services for their child(ren), with a focus on how immigrant parents with different documentation statuses navigate the health care system for their children. I would like to interview you about your own experiences enrolling your children in health insurance coverage through your or your partner's job or in Medical Assistance, for example. I am also interested in your experiences seeking health care services for your children and how you feel you are treated in the health care system based on your documentation status. I would also like to ask you about your own health insurance coverage and access to health care services and how your experiences seeking insurance coverage and health care services for yourself differ from your experiences seeking these for your children. The information you, other parents, and key community informants provide will be used to inform public policies to improve access to coverage and care for the children of immigrants and to inform social service/health care providers about the barriers Latino immigrants face in accessing coverage and care for their children.

What will I ask you to do?

If you agree to participate in this research study, I will interview you for about one hour at a location that we both agree to. I will record the interview on a digital audio recorder. You may choose not to answer any of the questions from the interview and you may stop the interview at any time you wish.

Are there potential risks of participating in this project?

I will keep the information you provide confidential. I will not use your real name in any of my notes or in the audio recordings. I will use a number and not your name to identify your responses. This number will be included in the audio recording and any notes, but I will keep no record linking names to your study identification number. Any information you provide during the interview that could identify you will be erased from the audio recording. The audio recordings will be stored on a secure server in computer files that are protected with passwords. I am hiring HACER (Hispanic Advocacy and Community Empowerment Research, an organization that has many years of experience conducting research in the MN Latino immigrant community) at the University of Minnesota to type out the audio recordings of the interviews. However, before sharing with HACER, I will erase any

information that you provide during the interview that could be used to identify you. The audio recordings will be completely erased once they are not needed for the study. Any reports I write about this study will be written so that you cannot be identified.

Even though I am making efforts to minimize risks to you, we will talk about important, but sensitive issues related to your experience as an immigrant and your documentation status, as well as your experiences seeking health insurance coverage and health care for your children. This may bring about some emotional reactions or make you feel uncomfortable. You can choose to stop the interview at any time or not answer any questions you do not want to answer. If you do become seriously uncomfortable, I will also stop the interview. I have a list of resources I can share with you for possible support from social service agencies.

If any evidence of child abuse is disclosed during our interview, I would have to report it following child protection laws in Minnesota requiring mandatory reporting.

Are there potential benefits of participating in this project?
You will not personally benefit from participating in this interview.

Will you be paid for participating?
You will receive a $30.00 Target gift card for participating in this interview.

Can you decide if you want to participate in this study?
Your decision to participate in this study is completely voluntary. You can decide at any time not to participate in the interview or to stop the interview. Your decision will not affect your relationship with the University of Minnesota.

What if you have other questions about this study?
If you have any questions about the study, you can ask me now or you can contact me at 612-229-8164 or my advisor, Kathleen Call, at 612-624-3922.

If you would like to talk to someone other than me or my adviser, you are encouraged to contact the University of Minnesota Research Subjects' Advocate Line: D-528 Mayo, 420 Delaware Street S.E., Minneapolis, Minnesota, 55455; telephone (612) 625-1650.

If you agree to participate, I will give you a copy of this form.

Key Informant Participant Information Sheet
for the Research Project:
"Parental documentation status, state policy, and coverage among Latino children"

You are invited to participate in a research study that focuses on your experiences working directly with or within the policy arena of Latino immigrant parents accessing health insurance coverage and health care services for their children. You are being invited to participate in this study because you are a staff person in a leadership and direct service role at a social service, health care, and/or state/county agency who has worked directly with the immigrant community for at least five years and/or identify themselves as sufficiently knowledgeable of immigrant parents' experiences navigating coverage and health care for their children. My name is Jessie Kemmick Pintor and I am a graduate student at the University of Minnesota seeking a degree from the School of Public Health. I am conducting this research under the guidance of my adviser, Kathleen Call, PhD. I hope to interview approximately 10 key informants like yourself and 20 Latino immigrant parents.

If you agree to participate, I would like to interview you for about an hour. Please read this form and ask me any questions you have about this study before agreeing to participate.

What is this research study about?

This research study explores the experiences of Latino immigrant parents seeking health insurance coverage and health care services for the child(ren), with a focus on how immigrant parents with different documentation statuses navigate the health care system for their children. I would like to interview about your own or your agency's experiences assisting Latino immigrant parents in enrolling their children in health insurance coverage or in Medical Assistance, for example. I am also interested in your experiences working with Latino immigrant parents seeking health care services for their children and how you feel they are treated in the health care system based on their documentation status. I would also like to ask about Latino immigrant parents' access to health insurance coverage and access to health care services and how their experiences seeking insurance coverage and health care services for themselves differ from their experiences seeking these for their children. The information you, other key informants, and parents provide will be used to inform public policies to improve access to coverage and care for the children of immigrants and to inform other social service/health care providers about the barriers Latino immigrants face in accessing coverage and care for their children.

What will you be asked to do?

If you agree to participate in this research study, I will interview you for about one hour at a location that we both agree to. I will record the interview on a digital audio recorder. You may choose not to answer any of the questions of the interview and you may stop the interview at any time you wish.

Are there potential risks of participating in this project?

I will keep the information you provide confidential. I will not use your real name in any of my notes or in the audio recordings. I will use a number and not your name to identify your responses. This number will be included in the audio recording and any notes, but I will keep no record linking names to your study identification number. Any information you provide during the interview that could identify you

will be erased from the audio recording. The audio recordings will be stored on a secure server in computer files are protected with passwords. I am hiring HACER (Hispanic Advocacy and Community Empowerment Research, an organization that has many years of experience conducting research in the MN Latino immigrant community) at the University of Minnesota to type out the audio recordings of the interviews. However, before sharing with HACER, I will erase any information that you provide during the interview that could be used to identify you. The audio recordings will be completely erased once they are not needed for the study. Any reports I write about this study will be written so that you cannot be identified.

Even though I am making efforts to minimize risks to you, we will talk about important, but sensitive issues related to your experience working with parents who lack documentation status. This may bring about some emotional reactions or make you feel uncomfortable. You can choose to stop the interview at any time or not answer any questions you do not want to answer. If you do become seriously uncomfortable, I will also stop the interview.

If any evidence of child abuse is disclosed during our interview, I would have to report it following child protection laws in Minnesota requiring mandatory reporting.

Are there potential benefits of participating in this project?
You will not personally benefit from participating in this interview.

Will you be paid for participating?
You will receive a $30.00 Target gift card for participating in this interview.

Can you decide if you want to participate in this study?
Your decision to participate in this study is completely voluntary. You can decide at any time not to participate in the interview or to stop the interview. Your decision will not affect your relationship with the University of Minnesota.

What if you have other questions about this study?
If you have any questions about the study, you can ask me now or you can contact me at 612-229-8164 or my advisor, Kathleen Call, at 612-624-3922.

If you would like to talk to someone other than me or my adviser, you are encouraged to contact the University of Minnesota Research Subjects' Advocate Line: D-528 Mayo, 420 Delaware Street S.E., Minneapolis, Minnesota, 55455; telephone (612) 625-1650.

If you agree to participate, I will give you a copy of this form.

Appendix F: Primary Codebook

Theme	Category	Sub-category	Code
Interview	ID		1-parent
Interview	ID		2-parent
Interview	ID		3-parent
Interview	ID		4-parent
Interview	ID		5-key informant
Interview	ID		6-parent
Interview	ID		7-parent
Interview	ID		8-key informant
Interview	ID		9-parent
Interview	ID		10-parent
Interview	ID		11-parent
Interview	ID		12-parent
Interview	ID		13-key informant
Interview	ID		14-parent
Interview	ID		15-parent
Interview	ID		16-key informant
Interview	ID		17-key informant
Interview	ID		18-key informant
Interview	ID		19-parent
Interview	ID		20-parent
Interview	Language		
Interview	Others present		
Interview	Place		
Demographic	Employment		Industry
Demographic	Employment		Experience
Demographic	Employment		Type
Demographic	Family		1-/2-parent
Demographic	Family		# children
Demographic	Immigration		Parental status
Demographic	Immigration		Children's birthplace
Demographic	Immigration		Year of arrival to US
Demographic	Immigration		Country of origin
Demographic	Immigration		Language
Demographic	Insurance coverage		Parents
Demographic	Insurance coverage		Children
Children's insurance	Barrier		None
Children's insurance	Barrier	System-level	Child's status
Children's insurance	Barrier	System-level	MA eligibility
Children's insurance	Barrier	System-level	Restricted emergency medical

			assistance
Children's insurance	Barrier	System-level	Income verification
Children's insurance	Barrier	System-level	Obamacare/MNsure: harder/more confusing
Children's insurance	Barrier	Community-level	Misinformation
Children's insurance	Duration		Always covered
Children's insurance	Duration		Gaps in coverage
Children's insurance	Experience		At county
Children's insurance	Experience		Children's app w/out parent SSN
Children's insurance	Facilitator	System-level	Newborn autoenroll
Children's insurance	Facilitator	Community-level	Friends/family
Children's insurance	Facilitator	Community-level	Comm. agency
Children's insurance	Facilitator	Community-level	Community assistance
Children's insurance	Facilitator	Community-level	Friends/family
Children's insurance	Feelings		About uninsurance:
Children's insurance	Feelings		About insurance:
Children's insurance	Feelings		Job security=insurance security
Children's insurance	Feelings		Worry
Children's insurance	Prenatal coverage		MA eligibility
Children's insurance	Prenatal coverage		MA and status
Access to ESI	Affordability		Affordable
Access to ESI	Affordability		Not affordable
Access to ESI	Experience		ESI motivation to find work
Access to ESI	Experience		ESI mandatory
Access to ESI	Experience		ACA employer mandate
Access to ESI	Experience		Lack of information about benefits
Access to ESI	Experience		Work injuries
Access to ESI	Experience		Discovery of status led to job/ESI loss
Access to ESI	Offer		No offer
Access to ESI	Offer		Offer
Access to ESI	Offer		Don't know
Access to ESI	Offer		Required but not offered
Children's health care	Barrier		None
Children's health care	Barrier	System-level	Cost
Children's health care	Barrier	System-level	No access to insurance
Children's health care	Barrier	System-level	Rural isolation
Children's health care	Barrier	System-level	No driver's license
Children's health care	Barrier	System-level	Parental status does affect
Children's health care	Barrier	Individual	Language
Children's health care	Barrier	Individual	Coverage gaps
Children's health care	Barrier	Individual	No parent in household
Children's health care	Cost		Collections

Children's health care	**Cost**		**Extended stress of bills**
Children's health care	**Cost**		**Accumulated effect w/ parents' med bills**
Children's health care	**Cost**		**Perception of cost**
Children's health care	**Facilitator**	**System-level**	**Safety net**
Children's health care	**Facilitator**	**System-level**	**Parental status does not affect**
Children's health care	**Facilitator**	**System-level**	**Interconnected system**
Children's health care	**Facilitator**	**System-level**	**Coverage**
Children's health care	**Facilitator**	**Community-level**	**Specialty referrals**
Children's health care	**Facilitator**	**Community-level**	**Clinic proximity**
Children's health care	**Facilitator**	**Community-level**	**Friends/family**
Children's health care	**Facilitator**	**Community-level**	**Verbal information**
Children's health care	**Facilitator**	**Community-level**	**Churches**
Children's health care	**Facilitator**	**Community-level**	**Community health worker**
Children's health care	**Feelings**		**Feels invisible**
Children's health care	**Need/use**		**Forgone, delayed specialty/emergent care**
Children's health care	**Need/use**		**ED**
Children's health care	**Need/use**		**Hospitalization**
Children's health care	**Quality**		**Treatment**
Children's health care	**Quality**		**Language barrier**
Immigration	**Children's status**		**Mixed status siblings**
Immigration	**Children's status**		**Rights**
Immigration	**Children's status**		**As barrier**
Immigration	**Feelings**		**Home country**
Immigration	**Feelings**		**Fear of public charge**
Immigration	**Parental status**		**Doesn't affect children**
Immigration	**Parental status**		**Life constraints**
Immigration	**Parental status**		**Interacting with institutions**
Immigration	**Parental status**		**Less restrictive in MN**
Immigration	**Parental status**		**Does affect children**
Immigration	**Parental status**		**Aware of/asserting rights**
Immigration	**Policy**		**Migrant worker services**
Immigration	**Policy**		**Driver's licenses**
Immigration	**Policy**		**MN more generous**
Immigration	**Policy**		**Not considering human beings**
Immigration	**Policy**		**Lack of immigrant representation**

Appendix G: Chapter 3. AIM 1. Full Marginal Effect Models

Appendix Table A3.5. Probit Marginal Effects Models of Probability of Being Insured by Children's Citizenship and Parental Documentation Status among the Children of Latino Immigrants

N=4227	(1) unadjusted		(2) + age and immigration-related characteristics		(3) + socioeconomic characteristics	
Children's citizenship X parental documentation status	ME	SE	ME	SE	ME	SE
Child citizen - parents citizens and LPRs	**REF**		**REF**		**REF**	
Child citizen - at least one undocumented parent	-4.9	(2.7)	**-5.6***	**(2.8)**	-2.3	(2.6)
Child noncitizen - parents citizens and LPRs	**-19.2*****	**(3.9)**	**-15.0*****	**(4.2)**	**-12.7****	(4.2)
Child noncitizen - at least one undocumented parent	**-35.5*****	**(4.7)**	**-30.5*****	**(5.0)**	**-26.0*****	(4.8)
Child's age						
0-2 years	**REF**		**REF**		**REF**	
3-5 years	**-5.1***	**(2.5)**	-4.5	(2.4)	-4.8	(2.5)
6-9 years	**-8.7*****	**(2.4)**	**-7.3****	**(2.4)**	**-7.4****	**(2.4)**
10-17 years	**-12.8*****	**(2.3)**	**-11.0*****	**(2.4)**	**-12.0*****	**(2.5)**
Immigration-related facilitators/barriers						
Parent in U.S. 5+ yrs						
No parent in U.S. 5+ yrs	-7.0	(3.9)	-2.8	(4.2)	-3.0	(4.0)
At least one parent in U.S. 5+ yrs	**REF**		**REF**		**REF**	
Parental English proficiency[1]						
Not well or not at all	**-6.7***	**(2.9)**	-3.0	(3.1)	0.5	(3.4)
Very well or well	**REF**		**REF**		**REF**	
Household linguistic isolation[2]						
Household linguistically isolated	-4.3	(3.1)	-3.5	(3.5)	-2.7	(3.5)
Household not linguistically isolated	**REF**		**REF**		**REF**	
Socioeconomic barriers/facilitators						
Parental education[3]						
Less than high school	-2.6	(2.8)			3.0	(3.0)
High school diploma or higher	**REF**				**REF**	
Parental employment						
No parent employed	-7.0	(4.0)			**-8.7***	**(4.0)**
Parent(s) only employed part-time	-4.9	(3.2)			-1.3	(3.2)
At least one parent employed full-time	**REF**				**REF**	
Parental industry by avg. ESI offer rate[4]						
No parent employed	**9.7***	**(4.4)**			N/A	
At least one parent employed, *but only in low ESI offer industry*	**-8.9***	**(3.9)**			-3.2	(4.0)
but only in mid ESI offer industry	-1.8	(2.9)			0.2	(2.9)

in high ESI offer industry	**REF**		**REF**
Parental firm size			
No parent employed	**-11.8** (4.1)**		N/A
Parent(s) temp./contingent employee(s)	12.4 (8.3)		-7.9 (7.3)
At least one parent employed, *but only in firm with under 25 employees*	**-14.4*** (3.1)**		**-9.0** (3.1)**
but only in firm with 25-99 employees	-5.5 (4.0)		-3.6 (4.1)
in firm with 100 or more employees	**REF**		**REF**
Family income as % of FPG[5]			
FPG <=100%	**-22.0*** (2.9)**		**-16.0*** (3.6)**
FPG 101-200%	**-20.2*** (2.8)**		**-16.9*** (2.9)**
FPG 201-300%	**13.7** (3.8)**		**-12.0** (3.9)**
FPG 301%+	**REF**		**REF**

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008

[1] Highest English language proficiency between parents

[2] Defined as household in which no person over age 14 speaks English very well

[3] Highest level of education between parents

[4] Low ESI offer rate industries: Agriculture, forestry, fishery; construction; other services
Mid ESI offer rate industries: Transportation, public utility; retail trade; professional services
High ESI offer rate industries: Manufacturing, mining; wholesale trade; finance, insurance, real estate; government, military

[5] Dept. of Health & Human Services federal poverty guidelines (FPG)

*p<.05, **p<.01, ***p<.001

All models include a dummy indicating the panel from which each child originated

Table A3.7. Multinomial Probit and Marginal Effects Models of Probability of Being Insured by ESI by Children's Citizenship and Parental Documentation Status among Children in Latino Immigrant Working Families

N=3824	**(1)** unadjusted		**(2)**+ age and immigration-related characteristics		(3)+ socioeconomic characteristics	
Children's citizenship status	ME	SE	ME	SE	ME	SE
Citizen child	**REF**		**REF**		**REF**	
Noncitizen child	**-16.0*** **	**(3.1)**	**-9.6** **	**(3.5)**	-3.7	(2.8)
Child's age						
0-2 years	**REF**		**REF**		**REF**	
3-5 years	-4.7	(2.8)	-3.1	(.28)	-.3.9	(2.7)
6-9 years	-4.8	(2.7)	-3.9	(2.4)	-4.5	(2.4)
10-17 years	1.8	(2.9)	-2.1	(2.7)	-2.2	(2.6)
Immigration-related barriers/facilitators						
Parent in U.S. 5+ yrs						
No parent in U.S. 5+ yrs	**-13.2** **	**(4.4)**	-5.7	(4.1)	-5.8	(3.0)
At least one parent in U.S. 5+ yrs	**REF**		**REF**		**REF**	
Parental English proficiency[1]						
Not well or not at all	**-26.0*** **	**(2.4)**	**-21.6*** **	**(2.7)**	**-8.6** **	**(2.7)**
Very well or well	**REF**		**REF**		**REF**	
Household linguistic isolation[2]						
Household linguistically isolated	**-24.0*** **	**(3.2)**	**-13.6*** **	**(3.7)**	**-6.6* **	**(3.0)**
Household not linguistically isolated	**REF**		**REF**		**REF**	
Socioeconomic barriers/facilitators						
Parental education[3]						
Less than high school	**-19.4*** **	**(2.7)**			-2.3	(2.1)
High school diploma or higher	**REF**				**REF**	
Parental employment						
Parent(s) only employed part-time	**-18.8*** **	**(2.8)**			-3.7	(3.1)
At least one parent employed full-time	**REF**				**REF**	
Parental industry by avg. ESI offer rate[4]						
At least one parent employed, *but only in low ESI offer industry*	**-29.7*** **	**(2.6)**			**-10.4*** **	**(2.4)**
but only in mid ESI offer industry	**-10.9** **	**(3.4)**			**-6.0* **	**(2.4)**
in high ESI offer industry	**REF**				**REF**	
Parental firm size						
Parent(s) temp./contingent employee(s)	**-42.7*** **	**(2.7)**			**-27.0* **	**(10.9)**
At least one parent employed, *but only in firm with under 25 employees*	**-35.3*** **	**(2.5)**			**-19.0*** **	**(2.8)**
but only in firm with 25-99 employees	**-23.0*** **	**(4.2)**			**-9.8** **	**(2.9)**
in firm with 100 or more employees	**REF**				**REF**	

Family income as % of FPG[5]			
FPG <=100%	**-65.1*** (3.4)**		**-43.9*** (4.4)**
FPG 101-200%	**-52.3*** (3.3)**		**-36.5*** (3.6)**
FPG 201-300%	**-28.5*** (4.5)**		**-21.4*** (4.0)**
FPG 301%+	**REF**		**REF**

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008

[1] Highest English language proficiency between parents

[2] Defined as household in which no person over age 14 speaks English very well

[3] Highest level of education between parents

[4] Low ESI offer rate industries: Agriculture, forestry, fishery; construction; other services
Mid ESI offer rate industries: Transportation, public utility; retail trade; professional services
High ESI offer rate industries: Manufacturing, mining; wholesale trade; finance, insurance, real estate government, military

[5] Dept. of Health & Human Services federal poverty guidelines (FPG)

*p<.05, **p<.01, ***p<.001

All models include a dummy indicating the panel from which each child originated

Table A3.13. Unadjusted and Adjusted Differences in Health Insurance Coverage by Parental Documentation Status among U.S.-Born Children of Latino Immigrants in 2-Parent Families

N=3034	(1) unadjusted		(2)+ age and immigration-related characteristics		(3) + socioeconomic characteristics	
Parental documentation status	ME	SE	ME	SE	ME	SE
Both parents citizens	**REF**		**REF**		**REF**	
At least one parent noncitizen, but no parent undocumented	-7.0	(3.8)	-6.9	(3.9)	-3.9	(4.0)
One parent undocumented	-6.8	(4.7)	-8.0	(4.8)	-4.1	(4.8)
Both parents undocumented	**-13.6***	**(5.7)**	**-14.7***	**(6.1)**	-8.3	(5.9)
Child's age						
0-2 years	**REF**		**REF**		**REF**	
3-5 years	**-5.3***	**(2.7)**	-4.9	(2.6)	**-5.2***	**(2.6)**
6-9 years	**-6.8***	**(2.7)**	**-7.1****	**(2.7)**	**-7.4****	**(2.7)**
10-17 years	**-10.2****	**(2.9)**	**-12.6*****	**(2.9)**	**-13.6*****	**(2.9)**
Immigration-related facilitators/barriers						
Parent(s) in U.S. 5+ yrs						
No parent in U.S. 5+ yrs	-4.9	(5.2)	-4.9	(5.2)	-5.1	(5.0)
At least one parent in U.S. 5+ yrs	**REF**		**REF**		**REF**	
Parental English proficiency[1]						
Not well or not at all	-4.3	(3.3)	-1.8	(3.6)	1.4	(3.6)
Very well or well	**REF**		**REF**		**REF**	
Household linguistic isolation[2]						
Household linguistically isolated	-1.3	(4.0)	-2.7	(4.5)	-2.2	(4.6)
Household not linguistically isolated	**REF**		**REF**		**REF**	
Socioeconomic barriers/facilitators						
Parental education[3]						
Less than high school	-1.3	(3.1)			3.8	(3.2)
High school diploma or higher	**REF**				**REF**	
Parental employment						
No parent employed	-8.9	(7.1)			-10.1	(6.2)
Parent(s) only employed part-time	-4.6	(3.6)			-1.9	(3.7)
At least one parent employed full-time	**REF**				**REF**	
Parental industry by avg. ESI offer rate[4]						
No parent employed	-10.9	(7.4)			N/A	
At least one parent employed,						
but only in low ESI offer industry	-7.1	(4.4)			-2.0	(4.5)
but only in mid ESI offer industry	-3.4	(3.4)			0.5	(3.5)
in high ESI offer industry	**REF**				**REF**	
Parental firm size						
No parent employed	-12.9	(7.3)			N/A	

Parent(s) temp./contingent employee(s)	1.3	(9.0)		4.4	(11.1)
At least one parent employed, *but only in firm with under 25 employees*	**-13.6*** **	**(3.5)**		**-9.6****	**(3.5)**
but only in firm with 25-99 employees	-3.0	(4.2)		-1.6	(4.5)
in firm with 100 or more employees	**REF**			**REF**	
Family income as % of FPG[5]					
FPG <=100%	**-17.7*** **	**(3.6)**		**-14.0****	**(4.3)**
FPG 101-200%	**-18.0*** **	**(3.2)**		**-14.4*** **	**(3.3)**
FPG 201-300%	**-12.6****	**(4.0)**		**-11.1****	**(3.9)**
FPG 301%+	**REF**			**REF**	

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008

[1] Highest English language proficiency between parents

[2] Defined as household in which no person over age 14 speaks English very well

[3] Highest level of education between parents

[4] Low ESI offer rate industries: Agriculture, forestry, fishery; construction; other services
Mid ESI offer rate industries: Transportation, public utility; retail trade; professional services
High ESI offer rate industries: Manufacturing, mining; wholesale trade; finance, insurance, real estate; government, military

[5] Dept. of Health & Human Services federal poverty guidelines (FPG)

*p<.05, **p<.01, ***p<.001

All models include a dummy indicating the panel from which each child originated

Table A3.14. Multinomial Probit Marginal Effects of Parental Documentation Status on Being Insured by ESI among the Citizen Children in Latino Immigrant Working 2-Parent Families

N=2893	(1) unadjusted		(2) + age and immigration-related characteristics		(3)+ socioeconomic characteristics	
Parental documentation status	ME	SE	ME	SE	ME	SE
Both parents citizens	**REF**		**REF**		**REF**	
At least one parent noncitizen, but no parent undocumented	**-23.9*****	**(4.1)**	**-15.9*****	**(4.1)**	-4.0	(3.5)
One parent undocumented	**-32.4*****	**(4.6)**	**-23.4*****	**(4.7)**	**-10.5***	**(4.2)**
Both parents undocumented	**-44.0*****	**(4.2)**	**-32.2*****	**(4.9)**	**-10.6***	**(4.8)**
Child's age						
0-2 years	**REF**		**REF**		**REF**	
3-5 years	-4.5	(3.0)	-3.6	(3.1)	-4.7	(3.1)
6-9 years	-2.3	(3.0)	-3.8	(2.8)	-5.2	(2.7)
10-17 years	5.6	(3.1)	-1.3	(2.8)	-4.1	(2.8)
Immigration-related facilitators/barriers						
Parent in U.S. 5+ yrs						
No parent in U.S. 5+ yrs	**-15.9****	**(5.8)**	-7.0	(5.3)	**-8.4***	**(3.8)**
At least one parent in U.S. 5+ yrs	**REF**		**REF**		**REF**	
Parental English proficiency[1]						
Not well or not at all	**-29.5*****	**(2.8)**	**-21.1*****	**(3.3)**	**-9.7****	**(3.2)**
Very well or well	**REF**		**REF**		**REF**	
Household linguistic isolation[2]						
Household linguistically isolated	**-27.1*****	**(4.0)**	**-11.5****	**(4.2)**	**-7.2***	**(3.6)**
Household not linguistically isolated	**REF**		**REF**		**REF**	
Socioeconomic barriers/facilitators						
Parental education[3]						
Less than high school	**23.1*****	**(2.9)**			**-4.9***	**(2.4)**
High school diploma or higher	**REF**				**REF**	
Parental employment						
Parent(s) only employed part-time	**-21.1*****	**(3.8)**			-4.4	(4.2)
At least one parent employed full-time	**REF**				**REF**	
Parental industry by avg. ESI offer rate[4]						
At least one parent employed, *but only in low ESI offer industry*	**-31.8*****	**(3.2)**			**-9.0****	**(3.3)**
but only in mid ESI offer industry	**-8.6***	**(3.9)**			-4.0	(3.1)
in high ESI offer industry	**REF**				**REF**	
Parental firm size						
Parent(s) temp./contingent employee(s)	**-45.0*****	**(4.2)**			-19.8	(14.3)

At least one parent employed,			
but only in firm with under 25 employees	**-37.8*** (2.9)**		**-19.3*** (3.3)**
but only in firm with 25-99 employees	**-25.0*** (4.6)**		**-9.4** (3.5)**
in firm with 100 or more employees	**REF**		**REF**
Family income as % of FPG[5]			
FPG <=100%	**-65.1*** (3.7)**		**-41.0*** (4.7)**
FPG 101-200%	**-50.4*** (3.6)**		**-30.9*** (3.8)**
FPG 201-300%	**-26.6*** (4.8)**		**-18.0*** (4.0)**
FPG 301%+	**REF**		**REF**

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008

[1] Highest English language proficiency between parents

[2] Defined as household in which no person over age 14 speaks English very well

[3] Highest level of education between parents

[4] Low ESI offer rate industries: Agriculture, forestry, fishery; construction; other services
Mid ESI offer rate industries: Transportation, public utility; retail trade; professional services
High ESI offer rate industries: Manufacturing, mining; wholesale trade; finance, insurance, real estate; government, military

[5] Dept. of Health & Human Services federal poverty guidelines (FPG)

*p<.05, **p<.01, ***p<.001

All models include a dummy indicating the panel from which each child originated

Table A3.14. Multinomial Probit Marginal Effects of Parental Documentation Status on Being Insured by Medicaid/CHIP among the Citizen Children in Latino Immigrant Working 2-Parent Families

N=2893	(1) unadjusted		(2) + age and immigration-related characteristics		(3) + socioeconomic characteristics	
Parental documentation status	ME	SE	ME	SE	ME	SE
Both parents citizens	**REF**		**REF**		**REF**	
At least one parent noncitizen, but no parent Undocumented	**18.2*** **	**(3.1)**	**11.4*** *	**(3.3)**	3.7	(3.7)
One parent undocumented	**26.2*** **	**(5.8)**	**17.2*** *	**(5.8)**	9.4	(5.8)
Both parents undocumented	**34.5*** **	**(5.2)**	**21.2*** **	**(5.3)**	6.5	(5.2)
Child's age						
0-2 years	**REF**		**REF**		**REF**	
3-5 years	-2.9	(3.4)	-3.2	(3.2)	-2.2	(3.0)
6-9 years	**-5.9***	**(2.9)**	-4.5	(2.8)	-3.1	(2.7)
10-17 years	**-19.1*** **	**(2.9)**	**-14.1*** **	**(2.9)**	**-11.6*** **	**(2.9)**
Immigration-related facilitators/barriers						
Parent(s) in U.S. 5+ yrs						
No parent in U.S. 5+ yrs	10.7	(6.0)	0.6	(5.6)	1.0	(5.0)
At least one parent in U.S. 5+ yrs	**REF**		**REF**		**REF**	
Parental English proficiency[1]						
Not well or not at all	**24.9*** **	**(2.5)**	**19.4*** **	**(2.9)**	**11.0*** *	**(3.1)**
Very well or well	**REF**		**REF**		**REF**	
Household linguistic isolation[2]						
Household linguistically isolated	**23.0*** **	**(4.0)**	5.2	(4.3)	2.0	(4.1)
Household not linguistically isolated	**REF**		**REF**		**REF**	
Socioeconomic barriers/facilitators						
Parental education[3]						
Less than high school	**19.6*** **	**(2.7)**			5.7	(2.9)
High school diploma or higher	**REF**				**REF**	
Parental employment						
Parent(s) only employed part-time	**16.3*** **	**(4.2)**			1.9	(3.9)
At least one parent employed full-time	**REF**				**REF**	
Parental industry by avg. ESI offer rate[4]						
At least one parent employed, *but only in low ESI offer industry*	**26.0*** **	**(3.7)**			**8.7***	**(3.7)**
but only in mid ESI offer industry	**8.2***	**(3.8)**			6.8	(3.5)
in high ESI offer industry	**REF**				**REF**	
Parental firm size						
Parent(s) temp./contingent employee(s)	**46.1*** **	**(9.8)**			18.0	(12.2)

At least one parent employed, *but only in firm with under 25 employees*	**23.0***(2.9)**		**6.8* (2.8)**
but only in firm with 25-99 employees	**21.4***(5.3)**		7.9 (4.0)
in firm with 100 or more employees	**REF**		**REF**
Family income as % of FPG[5]			
FPG <=100%	**49.9***(3.9)**		**32.7*** (5.6)**
FPG 101-200%	**33.8***(3.6)**		**23.8*** (4.5)**
FPG 201-300%	**13.4** (3.8)**		**10.6* (4.3)**
FPG 301%+	**REF**		**REF**

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008

[1] Highest English language proficiency between parents

[2] Defined as household in which no person over age 14 speaks English very well

[3] Highest level of education between parents

[4] Low ESI offer rate industries: Agriculture, forestry, fishery; construction; other services
Mid ESI offer rate industries: Transportation, public utility; retail trade; professional services
High ESI offer rate industries: Manufacturing, mining; wholesale trade; finance, insurance, real estate; government, military

[5] Dept. of Health & Human Services federal poverty guidelines (FPG)

*p<.05, **p<.01, ***p<.001

All models include a dummy indicating the panel from which each child originated

Appendix H. Sensitivity Analyses for Imputed Parental Documentation Status

Sensitivity analyses for: Table 3.1. Insurance type of children of Latino immigrants by children's citizenship and parental documentation status

		Citizen children				Noncitizen children				
	Total	Parents citizens/LPRs	At least one parent undocumented	χ2	Total citizen children (A)	Parents citizens/LPRs	At least one parent undocumented	χ2	Total noncitizen children (B)	χ2 (A vs. B)
Full sample* (N=4227)										
Insurance type										
Uninsured	30.8%	26.9%	31.8%	***	28.2%	46.1%	62.4%	NS	54.1%	***
Employer-sponsored insurance	26.7%	33.5%	12.7%		28.2%	16.9%	9.9%		13.5%	
Public (Medicaid/CHIP)	38.8%	35.6%	53.3%		40.1%	30.0%	24.6%		27.4%	
Other private (direct purchase/other)	3.6%	3.9%	2.2%		3.5%	6.9%	3.1%		5.0%	
Excluding children with SIPP-imputed parental status (n=3314)										
Insurance type										
Uninsured	29.9%	24.8%	31.9%	***	26.6%	45.6%	69.2%	*	56.9%	***
Employer-sponsored insurance	28.8%	36.8%	12.5%		30.8%	15.7%	7.8%		11.9%	
Public (Medicaid/CHIP)	37.7%	34.3%	54.0%		39.1%	30.4%	20.5%		25.6%	
Other private (direct purchase/other)	3.7%	4.1%	1.5%		3.5%	8.3%	2.6%		5.6%	
Excluding children with (my) imputed parental status (n=4147)										
Insurance type										
Uninsured	30.9%	26.9%	32.4%	***	28.2%	47.0%	61.5%	NS	54.3%	***
Employer-sponsored insurance	26.7%	32.8%	13.0%		28.2%	16.6%	10.2%		13.3%	
Public (Medicaid/CHIP)	38.8%	36.3%	52.2%		40.0%	30.3%	25.0%		27.6%	
Other private (direct purchase/other)	3.7%	4.0%	2.3%		3.6%	6.2%	3.3%		4.8%	

*Including children with imputed parental documentation status

Sensitivity analyses for: Tables 3.3-3.5. Probit marginal effects models of probability of being insured by children's citizenship status among the children of Latino immigrants (Final model (3))

Full sample* (n=4227)		
Children's citizenship status	ME	SE
Child citizen	**REF**	
Child noncitizen	**-16.8*** **	**(2.9)**
Parental documentation status	ME	SE
Parents citizens and LPRs	**REF**	
At least one undocumented parent	**-5.3***	**(2.3)**
Children's citizenship X parental documentation status	ME	SE
Child citizen - parents citizens and LPRs	**REF**	
Child citizen - at least one undocumented parent	-2.3	(2.6)
Child noncitizen - parents citizens and LPRs	**-12.7****	**(4.2)**
Child noncitizen - at least one undocumented parent	**-26.0*****	**(4.8)**

Excluding children with SIPP-imputed parental status (n=3314)		
Children's citizenship status	ME	SE
Child citizen	**REF**	
Child noncitizen	**-19.9*****	**(2.9)**
Parental documentation status	ME	SE
Parents citizens and LPRs	**REF**	
At least one undocumented parent	**-8.1****	**(2.6)**
Children's citizenship X parental documentation status	ME	SE
Child citizen - parents citizens and LPRs	**REF**	
Child citizen - at least one undocumented parent	3.9	(2.9)
Child noncitizen - parents citizens and LPRs	**-13.9****	**(4.7)**
Child noncitizen - at least one undocumented parent	**-34.6*****	**(4.7)**

Excluding children with (my) imputed parental status (n=4147)		
Children's citizenship status	ME	SE
Child citizen	**REF**	
Child noncitizen	**-17.2*****	**(3.0)**
Parental documentation status	ME	SE
Parents citizens and LPRs	**REF**	
At least one undocumented parent	-4.6	(2.4)
Children's citizenship X parental documentation status	ME	SE
Child citizen - parents citizens and LPRs	**REF**	
Child citizen - at least one undocumented parent	-1.4	(2.7)
Child noncitizen - parents citizens and LPRs	**-13.2****	**(4.2)**
Child noncitizen - at least one undocumented parent	**-26.0*****	**(4.9)**

*Including children with imputed parental documentation status

Sensitivity analyses for: Table 3.7. Multinomial probit marginal effects of probability of being insured by ESI by children's citizenship and parental documentation status among children in Latino immigrant working families (Final model (3))

Full sample* (n=3824)		
Children's citizenship status	ME	SE
Child citizen	**REF**	
Child noncitizen	-3.7	(2.8)
Parental documentation status	ME	SE
Parents citizens and LPRs	**REF**	
At least one undocumented parent	**-7.1****	**(2.5)**
Children's citizenship X parental documentation status	ME	SE
Child citizen - parents citizens and LPRs	**REF**	
Child citizen - at least one undocumented parent	**-7.3****	**(2.7)**
Child noncitizen - parents citizens and LPRs	-3.7	(3.6)
Child noncitizen - at least one undocumented parent	-7.6	(4.3)

Excluding children with SIPP-imputed parental status (n=2293)		
Children's citizenship status	ME	SE
Child citizen	**REF**	
Child noncitizen	-6.4	(3.4)
Parental documentation status	ME	SE
Parents citizens and LPRs	**REF**	
At least one undocumented parent	**-7.2***	**(3.1)**
Children's citizenship X parental documentation status	ME	SE
Child citizen - parents citizens and LPRs	**REF**	
Child citizen - at least one undocumented parent	**-7.5***	**(3.4)**
Child noncitizen - parents citizens and LPRs	-6.6	(4.1)
Child noncitizen - at least one undocumented parent	-10.1	(5.5)

Excluding children with (my) imputed parental status (n=3754)		
Children's citizenship status	ME	SE
Child citizen	**REF**	
Child noncitizen	-4.2	(2.8)
Parental documentation status	ME	SE
Parents citizens and LPRs	**REF**	
At least one undocumented parent	**-6.4***	**(2.5)**
Children's citizenship X parental documentation status	ME	SE
Child citizen - parents citizens and LPRs	**REF**	
Child citizen - at least one undocumented parent	**-6.5***	**(2.7)**
Child noncitizen - parents citizens and LPRs	-4.4	(3.6)
Child noncitizen - at least one undocumented parent	-7.3	(4.4)

*Including children with imputed parental documentation status

Sensitivity analyses for: Table 3.9. Multinomial probit marginal effects of probability of being insured by Medicaid/CHIP by children's citizenship and parental documentation status among children in Latino immigrant working families (Final model (3))

Full sample* (n=3824)		
Children's citizenship status	ME	SE
Child citizen	**REF**	
Child noncitizen	**-14.5*** **	**(3.3)**
Parental documentation status	ME	SE
Parents citizens and LPRs	**REF**	
At least one undocumented parent	2.8	(2.5)
Children's citizenship X parental documentation status	ME	SE
Child citizen - parents citizens and LPRs	**REF**	
Child citizen - at least one undocumented parent	**6.2***	**(2.9)**
Child noncitizen - parents citizens and LPRs	**-9.8***	**(4.3)**
Child noncitizen - at least one undocumented parent	**-16.6*** **	**(4.3)**

Excluding children with SIPP-imputed parental status (n=2993)		
Children's citizenship status	ME	SE
Child citizen	**REF**	
Child noncitizen	**-16.4*** **	**(3.6)**
Parental documentation status	ME	SE
Parents citizens and LPRs	**REF**	
At least one undocumented parent	0.2	(2.6)
Children's citizenship X parental documentation status	ME	SE
Child citizen - parents citizens and LPRs	**REF**	
Child citizen - at least one undocumented parent	4.4	(2.9)
Child noncitizen - parents citizens and LPRs	-10.0	(5.1)
Child noncitizen - at least one undocumented parent	**-21.2*** **	**(4.4)**

Excluding children with (my) imputed parental status (n=3754)		
Children's citizenship status	ME	SE
Child citizen	**REF**	
Child noncitizen	**-14.4*** **	**(3.5)**
Parental documentation status	ME	SE
Parents citizens and LPRs	**REF**	
At least one undocumented parent	2.9	(2.5)
Children's citizenship X parental documentation status	ME	SE
Child citizen - parents citizens and LPRs	**REF**	
Child citizen - at least one undocumented parent	**6.5***	**(3.0)**
Child noncitizen - parents citizens and LPRs	**-9.3***	**(4.5)**
Child noncitizen - at least one undocumented parent	**-16.7*** **	**(4.5)**

*Including children with imputed parental documentation status

Sensitivity analyses for: Table 3.11. Insurance type of citizen children of Latino immigrants in 2-parent families by parental documentation status

	Total	Both parents citizens	At least one noncitizen but no undocumented parent	One parent undocumented	Both parents undocumented	
Full sample* (N=3034)						
Insurance type						
Uninsured	28.2%	22.0%	29.0%	28.8%	35.6%	***
Employer-sponsored insurance	31.2%	53.3%	28.8%	20.7%	9.7%	
Public (Medicaid/CHIP)	37.5%	20.4%	39.1%	47.1%	54.2%	
Other private (direct purchase/other)	3.1%	4.3%	3.1%	3.4%	0.5%	
Excluding children with SIPP-imputed parental status (n=2347)						
Insurance type						
Uninsured	26.5%	19.5%	26.9%	31.7%	34.7%	***
Employer-sponsored insurance	34.3%	57.6%	30.9%	20.4%	10.5%	
Public (Medicaid/CHIP)	36.3%	18.8%	39.0%	46.5%	54.1%	
Other private (direct purchase/other)	2.9%	4.1%	3.3%	1.5%	0.7%	
Excluding children with (my) imputed parental status (n=2979)						
Insurance type						
Uninsured	28.3%	22.0%	29.7%	27.8%	35.2%	***
Employer-sponsored insurance	31.1%	53.3%	28.2%	21.2%	9.9%	
Public (Medicaid/CHIP)	37.4%	20.4%	38.9%	47.5%	54.4%	
Other private (direct purchase/other)	3.2%	4.3%	3.2%	3.5%	0.6%	

*Including children with imputed parental documentation status

Sensitivity analyses for: Table 3.13. Probit marginal effects models of probability of being insured by children's citizenship status among citizen children in 2-parent Latino immigrant families (Final model (3))

Full sample* (n=3034)		
Parental documentation status	ME	SE
Both parents citizens	**REF**	
At least one parent noncitizen, but no parent undocumented	-3.9	(4.0)
One parent undocumented	-4.1	(4.8)
Both parents undocumented	-8.3	(5.9)

Excluding children with SIPP-imputed parental status (n=2347)		
Parental documentation status	ME	SE
Both parents citizens	**REF**	
At least one parent noncitizen, but no parent undocumented	-3.4	(4.0)
One parent undocumented	-9.1	(5.8)
Both parents undocumented	-8.7	(6.2)

Excluding children with (my) imputed parental status (n=2979)		
Parental documentation status	ME	SE
Both parents citizens	**REF**	
At least one parent noncitizen, but no parent undocumented	-4.6	-4.1
One parent undocumented	-3.0	(4.9)
Both parents undocumented	-8.0	(5.9)

*Including children with imputed parental documentation status

Sensitivity analysis for: Table 3.14. Multinomial probit marginal effects of parental documentation status on type of coverage among the citizen children in Latino immigrant working 2-parent families

ESI

Full sample* (n=2893)

Parental documentation status	ME	SE
Both parents citizens	**REF**	
At least one parent noncitizen, but no parent undocumented	-4.0	(3.5)
One parent undocumented	**-10.5***	**(4.2)**
Both parents undocumented	**-10.6***	**(4.8)**

Excluding children with SIPP-imputed parental status (n=2239)

Parental documentation status	ME	SE
Both parents citizens	**REF**	
At least one parent noncitizen, but no parent undocumented	-1.3	(3.3)
One parent undocumented	-9.4	(5.5)
Both parents undocumented	-7.9	(5.5)

Excluding children with (my) imputed parental status (n=2840)

Parental documentation status	ME	SE
Both parents citizens	**REF**	
At least one parent noncitizen, but no parent undocumented	-4.8	(3.6)
One parent undocumented	**-9.9***	**(4.4)**
Both parents undocumented	**-10.4***	**(4.8)**

*Including children with imputed parental documentation status

Medicaid/CHIP

Full sample* (n=2893)

Parental documentation status	ME	SE
Both parents citizens	**REF**	
At least one parent noncitizen, but no parent undocumented	3.7	(3.7)
One parent undocumented	9.4	(5.8)
Both parents undocumented	6.5	(5.2)

Excluding children with SIPP-imputed parental status (n=2239)

Parental documentation status	ME	SE
Both parents citizens	**REF**	
At least one parent noncitizen, but no parent undocumented	1.4	(4.0)
One parent undocumented	4.8	(6.1)
Both parents undocumented	3.2	(5.8)

Excluding children with (my) imputed parental status (n=2840)

Parental documentation status	ME	SE
Both parents citizens	**REF**	
At least one parent noncitizen, but no parent undocumented	3.6	(3.7)
One parent undocumented	9.9	(5.9)
Both parents undocumented	6.8	(5.2)

*Including children with imputed parental documentation status

Appendix I: Chapter 4. AIM 2. Full Coefficient Models

Table A4.4. Model Coefficients by State-Level Prenatal Coverage and Parental Documentation Status among the Citizen Children of Latino Immigrants

N=3615	2) Meprobit Random coefficients model - no weights, unstructured covariance	3) Svy: probit (one-level w/ person weights)
Fixed effects		
Intercept	.530 (.322)	.568 (.333)
Parental documentation by prenatal index		
Prenatal coverage - citizen/LPR parents	**.648** (.226)**	**.448* (.180)**
Prenatal coverage - at least one parent undocumented	-.445 (.232)	**.523** (.177)**
Restricted prenatal coverage -citizen/LPR parents	.399 (.207)	**.427** (.140)**
Restricted prenatal coverage - at least one parent undocumented	**REF**	**REF**
Child's age		
0-2 years	**REF**	**REF**
3-5 years	-.081 (.080)	-.171 (.089)
6-9 years	**-.217** (.077)**	**-.233** (.080)**
10-17 years	**-.292*** (.071)**	**-.352*** (.085)**
Immigration-related facilitators/barriers		
Parent(s) in U.S. 5+ yrs		
No parent in U.S. 5+ yrs	-.315 (.081)	-.189 (.121)
At least one parent in U.S. 5+ yrs	**REF**	**REF**
Parental English proficiency[1]		
Not well or not at all	-.096 (.055)	-.022 (.101)
Very well or well	**REF**	**REF**
Household linguistic isolation[2]		
Household linguistically isolated	.004 (.067)	-.102 (.116)
Household not linguistically isolated	**REF**	**REF**
Socioeconomic barriers/facilitators		
Parental education[3]		
Less than high school	-.004 (.056)	.082 (.099)
High school diploma or higher	**REF**	**REF**
Parental employment		
No parent employed	**-.361** (.104)**	**-.269* (.129)**
Parent(s) only employed part-time	-.093 (.063)	-.080 (.103)
At least one parent employed full-time	**REF**	**REF**
Parental industry by avg. ESI offer rate[4]		
No parent employed	**N/A**	**N/A**
At least one parent employed,		
but only in low ESI offer industry	-.048 (.068)	-.020 (.129)
but only in mid ESI offer industry	-.020 (.064)	.045 (.094)
in high ESI offer industry	**REF**	**REF**
Parental firm size		
No parent employed	**N/A**	
Parent(s) temporary/contingent employee(s)	**-.384* (.183)**	-.144 (.255)
At least one parent employed,	**-.376*** (.060)**	**-.272* (.107)**

but only in firm with under 25 employees		
but only in firm with 25-99 employees	**-.177* (.079)**	-.131 (.130)
in firm with 100 or more employees	**REF**	**REF**
Family income as % of FPG[5]		
FPG <=100%	-.035 (.062)	-.047 (.087)
FPG 101-200%	-.034 (.084)	.033 (.126)
FPG 201-300%	**.196* (.091)**	**.433** (.134)**
FPG 301%+	**REF**	**REF**
State-level covariates		
% growth in foreign-born population (2000-2011)		
Less than 35%	**-.559** (.198)**	**-.376* (.147)**
35% or greater	**REF**	**REF**
% Latino		
Less than 5%	**REF**	**REF**
5-10%	.299 (.253)	.507 (.295)
Greater than 10%	-.125 (.361)	.319 (.383)
% foreign-born		
Less than 5%	**REF**	**REF**
5-10%	.289 (.248)	-.029 (.270)
10-15%	.263 (.329)	.155 (.357)
Greater than 15%	-.200 (.439)	**.034 (.426)**
% non-citizen		
Less than 5%	**REF**	REF
5-10%	-.181 (.334)	-.436 (.319)
Greater than 10%	-.137 (.425)	-.482 (.354)
% undocumented (of total foreign-born)		
Less than 3%	**REF**	**REF**
3-5%	.252 (.302)	.080 (.252)
Greater than 5%	.365 (.506)	-.214 (.315)
Random effects		
Variance of random intercept	.3199 (.1183)	N/A
Variance of random slope - parental documentation status	1.164 (.4977)	N/A
Cov (random intercept, parental documentation status)	-.4123 (.279)	N/A
Intraclass correlation coefficient (ICC)	0.089	N/A

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008

[1] Highest English language proficiency between parents

[2] Defined as household in which no person over age 14 speaks English very well

[3] Highest level of education between parents

[4] Low ESI offer rate industries: Agriculture, forestry, fishery; construction; other services
Mid ESI offer rate industries: Transportation, public utility; retail trade; professional services
High ESI offer rate industries: Manufacturing, mining; wholesale trade; finance, insurance, real estate; government, military

[5] Dept. of Health & Human Services federal poverty guidelines (FPG)

*p<.05, **p<.01, ***p<.001

All models include a dummy indicating the panel from which each child originated

All models restricted to citizen children in 30 states with sufficient sample for multilevel modeling

Appendix J: Chapter 4. AIM 2. Sensitivity Analyses

Sensitivity Analysis for: Table 4.3. Coverage Distribution among the Citizen Children of Latino Immigrants by Parental Documentation Status and Immigrant Access to Prenatal Coverage (FOR CITIZEN CHILDREN IN ALL 50 STATES)*

	Prenatal coverage regardless of immigration status			Prenatal coverage restricted		
	Parents citizens/LPRS	At least one parent undocumented	Diff.	Parents citizens/LPRS	At least one parent undocumented	Diff.
Uninsured	26.3%	26.4%	-0.1% NS	28.4%	42.7%	**-14.3%****
ESI	33.3%	12.1%	**21.2%*****	34.4%	13.9%	**20.5%*****
Medicaid/CHIP	36.8%	58.6%	**-21.8%*****	32.6%	42.5%	**-9.9%***
Other private	3.6%	2.9%	0.7% NS	4.6%	0.9%	**3.7%****

Sensitivity Analysis for: Table 4.4. Model Coefficients by State-Level Prenatal Coverage and Parental Documentation Status among the Citizen Children of Latino Immigrants (FOR CITIZEN CHILDREN IN ALL 50 STATES)*

N=3739	3) Svy: probit (one-level w/ person weights)
Fixed effects	
Intercept	.568 (.333)
Parental documentation by prenatal index	
Prenatal coverage - citizen/LPR parents	**.368* (.168)**
Prenatal coverage - at least one parent undocumented	**.444* (.171)**
Restricted prenatal coverage -citizen/LPR parents	**.355* (.135)**
Restricted prenatal coverage - at least one parent undocumented	**REF**
Child's age	
0-2 years	**REF**
3-5 years	**-.187* (.087)**
6-9 years	**-.237** (.080)**
10-17 years	**-.371*** (.083)**
Immigration-related facilitators/barriers	
Parent(s) in U.S. 5+ yrs	
No parent in U.S. 5+ yrs	-.186 (.120)
At least one parent in U.S. 5+ yrs	**REF**
Parental English proficiency[1]	
Not well or not at all	-.016 (.098)
Very well or well	**REF**
Household linguistic isolation[2]	
Household linguistically isolated	-.119 (.113)
Household not linguistically isolated	**REF**
Socioeconomic barriers/facilitators	
Parental education[3]	
Less than high school	.089 (.097)
High school diploma or higher	**REF**
Parental employment	
No parent employed	**-.283* (.128)**
Parent(s) only employed part-time	-.079 (.100)
At least one parent employed full-time	**REF**
Parental industry by avg. ESI offer rate[4]	
No parent employed	**N/A**
At least one parent employed,	
but only in low ESI offer industry	-.046 (.129)
but only in mid ESI offer industry	.029 (.093)
in high ESI offer industry	**REF**
Parental firm size	
No parent employed	
Parent(s) temporary/contingent employee(s)	-.147 (.251)
At least one parent employed,	
but only in firm with under 25 employees	**-.283** (.107)**
but only in firm with 25-99 employees	-.151 (.131)
in firm with 100 or more employees	**REF**
Family income as % of FPG[5]	
FPG <=100%	-.052 (.087)

FPG 101-200%	.026 (.121)
FPG 201-300%	**.427** (.133)**
FPG 301%+	**REF**
<u>**State-level covariates**</u>	
% growth in foreign-born population (2000-2011)	
Less than 35%	**-.382** (.139)**
35% or greater	**REF**
% Latino	
Less than 5%	**REF**
5-10%	.423 (.278)
Greater than 10%	.235 (.360)
% foreign-born	
Less than 5%	**REF**
5-10%	-.092 (.255)
10-15%	.293 (.346)
Greater than 15%	.196 (.408)
% non-citizen	
Less than 2%	REF
2-5%	.202 (.633)
5-10%	-.169 (.714)
Greater than 10%	-.219 (.720)
% undocumented (of total foreign-born)	
Less than 1%	**REF**
1-3%	-.433 (.777)
3-5%	-.423 (.807)
Greater than 5%	-..723 (.809)

Source: Survey of Income & Program Participation, 2004 Panel Wave 12, August 2007; 2008 Panel Wave 2, December 2008

[1] Highest English language proficiency between parents

[2] Defined as household in which no person over age 14 speaks English very well

[3] Highest level of education between parents

[4] Low ESI offer rate industries: Agriculture, forestry, fishery; construction; other services
Mid ESI offer rate industries: Transportation, public utility; retail trade; professional services
High ESI offer rate industries: Manufacturing, mining; wholesale trade; finance, insurance, real estate; government, military

[5] Dept. of Health & Human Services federal poverty guidelines (FPG)

*p<.05, **p<.01, ***p<.001

All models include a dummy indicating the panel from which each child originated

Appendix K: Chapter 5. Parent and Key Informant Interview Profiles

Parents

Roberto (ID 1) (*I use pseudonyms for both parents and key informants*): For the first interview, I met Roberto in a local safety net clinic's conference room on a weekday evening. We immediately recognized each other from a community forum I had participated in about a year earlier and he was eager to share his story. He was very talkative and passionate about access to health care for immigrants. At 1 hour, 26 minutes (*I do not include migration history in this time, for Roberto or any other interviews*) this interview was easily the longest of my parent interviews. I asked few questions as he covered almost my entire interview guide without my prompting. He talked for over a half hour about his brutal, dangerous experience crossing the border when his eldest daughter was just a baby. His wife stayed in Mexico until a few years later when they both joined him. His other two children were born in the U.S., and thus he spoke extensively about the differences in access for his mixed-status children. His eldest daughter had just recently received DACA, but he and his wife remained undocumented after over 20 years in the U.S. The eldest daughter and Roberto and his wife were all uninsured – but had a discount plan for limited services through a large safety net ACO – while the youngest two were covered by *Medical Assistance*.

Beatriz (ID 2): I also met Beatriz at the safety net clinic on a weekday evening and at first she seemed a bit shy and hesitant to talk. For the first several minutes, she gave mostly one word or one-sentence answers, but started to discuss more after a bit more probing. These short responses could have also been an artifact of the way in which I was

asking questions, which I considered and tried to keep in mind for subsequent interviews. She emphasized that she hadn't encountered any barriers and had had good experiences with health insurance and the health care system, so that may have driven her not talking very much. This interview was one of the shortest at 27 minutes. Interestingly enough, once I turned off the recorder at the end of the interview, she seemed more comfortable and kept chatting for quite some time before we parted. Her adorable, talkative toddler (3 years old) was with us during the interview, which also made it a bit difficult for her to converse freely, as any parent of a toddler would understand. She and her spouse were undocumented and their four children were born in the U.S. All four children were insured under *Medical Assistance* and she and her husband had a discount plan at a large safety net ACO.

Alma (ID 3): I met Alma at the safety net clinic on the same evening as the previous interview. She was also a bit quiet at first but then very talkative for the remainder of our interview (which last 1 hour and 21 minutes), sharing many detailed experiences of her time navigating the system for her children, all born in the U.S., and herself, an undocumented immigrant. She explained MA enrollment and renewal step-by-step, conveying the savviness required to maintain children's insurance active. She had one child who was born with a serious birth defect and thus they had frequent health care visits and exposure to Medicare coverage for disabled persons. She shared a few very negative health care experiences, but was always quick to point out that she "hadn't had it too bad." She had faced a life-threatening emergency during childbirth and struggled with poor access to interpreters. She and her husband both had the same discount plan and

their children were covered under *Medical Assistance* and Medicare (their youngest child due to his condition).

*It was after this last interview that I decided I needed to seek a location outside of the safety net clinic. It had originally been chosen as what we thought would be a neutral place where participants would be comfortable. Those two points seemed valid and seemed to hold true, yet in reflecting on the interviews I was worried that parents were perhaps holding back on describing barriers they had faced in accessing care and during health care visits because the location of the interview may have given them the impression that the clinic was part of the study, despite my community liaison's and my explanation to the contrary. Consequently, we began to schedule interviews in other public places of parents' preference or in parents' homes; once given the choice, parents overwhelmingly preferred that I meet them at their homes.

Francisco (ID 4): Francisco and I met for this interview in a popular public space on a weekend morning, a convenient time for him because it fell outside of his work hours. The audio recording was at times difficult to pick up when the noise level jumped up, but I was able to fill in any holes from the transcription. Francisco talked at length about his experience migrating to the U.S., as he had migrated during a time in which the U.S. was granting temporary protection status to migrants from his home country. He had first arrived to California and had lived for many years, where he met his wife – a legal permanent resident – and they had their first daughter. Their second daughter was born in MN. I learned a great deal about the immigration system from hearing about his

experience bouncing from one immigration status to another and the uncertainty this entailed. Our interview lasted 40 minutes. He was currently uninsured, while his wife and two daughters were insured under *Medical Assistance*.

Margarita (ID 6): I went to Margarita's home for our interview on weekday early afternoon. She was home alone and kept a "novela" on in the background on low volume during the interview and her parakeets sang to us throughout the interview. Our interview was fairly quick (32 minutes) but full of rich details and painful contrasts between her eldest son's access to care and access for her two youngest children. The oldest child migrated ("crossed the border") with his parents when he was 3, and since then both he and his parents have remained undocumented. The three of them were uninsured, but had access to a safety net discount plan. She also had two US-born children, who were covered under *Medical Assistance*. She introduced me to a friend and her children before I left.

Teresa (ID 7): I also met Teresa at her home for our interview, on a late weekday evening. It was the night before Halloween and her youngest child and granddaughter were anxious for the day to arrive. The two children were in the living room with us for almost the entire interview, cheerfully playing, entertaining us, and asking many questions. The interview was fairly late in the evening, at the request of the mother, so one of the children fell asleep on the couch next to us during the interview. Other family members were home but were mostly in the kitchen and upstairs. Teresa, her husband, and her two oldest children had recently begun the process of adjusting to legal permanent residency. They were not yet allowed to work and were not yet eligible for

public programs, either. They were all uninsured but had a discount plan through a large ACO safety net. Her youngest child was born in Minnesota and had *Medical Assistance*. Although were children were of different statuses, she did not report her children needed much specialty care and thus did not discuss many contrasts in access to care between them. Our interview lasted 46 minutes.

Rosa (ID 9): I also met Rosa at her home, and she had several questions for me (about the interview and data privacy – mostly related to her documentation status) before beginning the interview, so we spent much more time beforehand than during the actual interview. I didn't want to pressure her into participating so I waited until I was absolutely sure she was comfortable before turning on the recorder and proceeding. As such, our interview was short at 23 minutes but we talked for a long time (almost 30-40 minutes) before that. I repeatedly emphasized that the interview was voluntary, that she would still receive the gift card whether she participated or no matter how long the interview lasted. I also emphasized that she did not have to answer any question she did not feel comfortable responding to. Even though the interview was short she did describe many details of her experiences navigating the health care system for her children. She and her husband were both undocumented, uninsured, and had a discount plan. Her three children were US-born and had *Medical Assistance*. To my surprise, given her initial hesitance, Rosa enthusiastically referred me to two mothers for interviews (through my community liaison), both of whom accepted and expressed that Rosa was really excited about their being able to participate as well.

Eliana (ID 10): I went to Eliana's home for our interview on a weekday evening. Her two youngest children were at home but entertained themselves for the most part. Eliana was very eager to share her experiences and I did not have to ask her many questions, as she answered most of them without my prompting. She was raising four children on her own, while receiving voluntary child support from her children's father. She was undocumented and uninsured (but had a discount plan); all four children were born in Minnesota had *Medical Assistance*. She shared very detailed accounts of her children's health care experiences, which will be very informative for my future work exploring quality of care and patient- and family-centered care. Our interview lasted 42 minutes.

Josefina (ID 11): I also met Josefina at her home for our interview, which lasted 35 minutes. She lived with several extended relatives and while her two kids were home at the time, they spent the whole time in the kitchen (they were older kids). She did have them come out to meet them briefly before I left. She was also raising her two US-born children on her own, but neither father was currently in the U.S. She was very enthusiastic about sharing her experiences and spoke quickly, so while the interview was only 35 minutes long, there were many details packed in. She was undocumented and uninsured; her children had *Medical Assistance*.

Leticia (ID 12): I met Leticia on the same evening I had met Josefina, so this interview took place rather late in the evening. Her three children were getting ready for bed, the eldest helping the younger children, and a novela was on in the background. She seemed less engaged in our interview but very engaged in the topic at hand. She was not disinterested but it was again late in the evening and she was understandably very busy

with her kids. Our interview was shorter at 31 minutes but it felt like I was trying too hard to find any other areas/themes for us to discuss after going through the interview guide and she was busy with her kids so I didn't to pry any further. She and her husband were undocumented and uninsured, but had a discount plan. Her three US-born children had *Medical Assistance*.

Irma (ID 14): I also met Irma in her home, on a weekday in the late afternoon. As with Roberto, Irma and I immediately recognized one another and she enthusiastically greeted me and expressed that she was relieved she knew me, as she had wondered about who would be interviewing her. She and I had crossed paths over a decade ago while I was working at the social service agency. Our interview lasted one hour and 11 minutes; she mostly talked extensively about her own very painful experiences in the health care system. Her two children were at home, but her oldest child was listening to music in a back room where her youngest child was napping. She brought both of them out to meet me before I left. I had met her when her oldest so was just a newborn, so she was very excited for me to meet him. She and her husband were undocumented and uninsured; she had a serious health condition but did not qualify for *Emergency Medical Assistance*. Their two children were born in Minnesota and had *Medical Assistance*.

Javier (ID 15): I met Javier at his home on a weekday early afternoon. Our interview lasted 35 minutes and he spoke at length about navigating the health care system for himself and his children. He spoke English fluently, while his wife did not, so he usually brought his kids to their health care visits. He suffered from a chronic condition and so had also had to have frequent contact with the system for his own care. He and his wife

had recently been approved for a provisional status, having adjusted from an undocumented status. Thus, they both had work permits and he himself had public coverage (MNCare); my community liaison had been working hard to identify insured parents for my remaining interviews. His three US-born children had *Medical Assistance*, but he shared that he and wife were earning too much so his children were going to be unenrolled shortly. They were exploring alternative options, including MNCare and ESI.

Gissel (ID 19): Gissel and I met in a public space over her lunch and our interview, conducted in English, lasted 31 minutes. It took quite a while to find a quiet spot to be able to record the interview and she had a limited lunch hour. She was a naturalized citizen who had come to the U.S. as an older adolescent and had naturalized a few years later. She and her only child had held ESI coverage for several years, save for when she was pregnant with him, as she did not qualify for public coverage but also didn't have access to *Medical Assistance*. Her son, born in the U.S., was uninsured for the first three years of his life. She shared many details about her ESI plan and her son's access to care under that plan.

Nancy (ID 20): I met Nancy in the common area of her apartment building for the last interview. Our interview lasted 31 minutes and was conducted in English. Nancy shared with me her experience with a very serious disease and the intense treatment she had undergone. I had asked her about her children's access but as a naturalized citizen with ESI that was extended to her three children, she did not feel that they had experienced any major barriers to care. She came to the U.S. as a young child and naturalized under her parents.

Community key informants

Grecia (ID 5): Our interview took place over the phone on a late weekday evening and lasted an hour and six minutes. Grecia is a colleague from many years ago with whom I had overlapped shortly in my work at a local social service agency serving Latino immigrants. She was employed by both a faith-based safety net and a government agency. She was very familiar with access in rural areas in MN and surrounding states, as much of her job entails traveling around with a mobile clinic. She shared much of the information without my probing, so I did not need to ask her many questions.

*After our interview, I went to meet Grecia at her workplace to give her the gift card for having participated and she subsequently introduced me to my next key informant, a woman who worked next door to her at a social service agency.

Azucena (ID 8): Our interview also took place over the phone on a weekday morning. We had originally had to reschedule after my daughter was hospitalized at the time of our original appointment. Grecia introduced me to Azucena, who worked extensively with Latino immigrant families at a social service agency. In her position, she assisted parents with applications for a variety of public programs and connected them to myriad resources. Our interview lasted 36 minutes.

Patricia (ID 13): I met Patricia at her office for our first interview, but we needed to cut it short and so the second half of our interview took place over the phone. The total interview recording was at 53 minutes. She was a CHW and now MNsure navigator at a large safety net plan. I had met her many years before at the social service agency I had

worked at and seen her at many community events, but this was the first time we had sat down to talk. Her office was surrounded by her children's artwork and I got a great feel for the welcoming presence the space presented for parents coming to her for assistance with MN health care program applications. I had been to her workplace for a community forum in the past, but had never been in her office. She talked at length about a number of issues included in my interview guide without much probing.

Mayra (ID 16): This interview took place over the phone and lasted 49 minutes. Mayra, a friend's co-worker, was a CHW from a small program within a large safety net ACO. She was very passionate about the political environment surrounding immigrants' access to care. Here again, I did not ask many questions as it was not necessary. Our interview was in English, although she is bilingual.

Sofia (ID 17): Sofia is a colleague from many years ago who now works within a specialty clinic in a large safety net ACO. I met her at her home for our interview, which lasted 34 minutes. She spoke extensively about access to interpreters, the quality of interpreter services, patient-centered care, and access to specialty services within the safety net.

Juan Carlos (ID 18): My final key informant interview was conducted over the phone with Juan Carlos, a friend of a friend who works at a firm that hires temporary workers for placement at outside firms, working specifically with Spanish-speaking applicants. My motivation behind this interview was to hear more about employment and access to ESI for Latino immigrants more generally. Our interview was short but fruitful (24

minutes); I didn't ask him many of the questions related to health care, but more about access to ESI.