Undocumented Immigrants and Health Care Reform

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Final report to The Commonwealth Fund

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August 31, 2012

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Acknowledgements

Funding for this report was provided by a grant from The Commonwealth Fund. Special data runs were provided by Jonathan Gruber at MIT.

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Executive Summary

The Patient Protection and Affordable Care Act (ACA), was signed into law by President Obama in 2010 (United States Congress 2010) and was in large part upheld by the Supreme Court of the United States in their June 2012 decision. Despite the far-reaching expansion of health care coverage for the large number of uninsured individuals in the US, the ACA explicitly excludes undocumented immigrants from purchasing health insurance coverage through the health exchanges. In addition, undocumented immigrants continue to be ineligible for most public forms of health insurance coverage and would not benefit from any Medicaid expansions carried out by the states.

Recent estimates suggest that 11.2 million undocumented immigrants resided in the United States in 2010; this figure includes 1 million undocumented children. An additional 4.5 million United States residents are the US-born children of undocumented immigrants. They typically live in "mixed status" families that include US citizens and undocumented immigrants in the same family. Undocumented immigrants are primarily from Mexico and other Latin American countries. While historically concentrated in a few destination states, including California, Florida, New York and Texas, about one-third of undocumented immigrants are now living in so-called "new destinations" states such as Illinois and Georgia.

The following report reviews the existing literature on the health and health care of undocumented immigrants in the United States and examines the implications of those patterns for their future health care under the ACA. Our report also reviews the costs associated with health care for undocumented immigrants and considers the impacts of the ACA on the health insurance coverage of undocumented immigrants nationally and on selected states. We supplement the literature review with analyses of the 2009 California Health Interview Survey (CHIS), a population-based survey of the state that hosts the largest share of the undocumented immigrant population in the US. In addition, we present estimates of uninsurance rates for the undocumented population before and after full implantation of ACA based on the Gruber MicroSimulation Model (GMSIM). Since undocumented immigrants are not eligible for health insurance coverage under the ACA, we review other policy options for providing health care and health insurance coverage for undocumented immigrants such as insurance coverage initiatives, expanded options for accessing care, and other means.

Key findings

Health Status

- Although the literature suggests that immigrants in general have better health status and lower rates of risky health behaviors compared to the US-born, factors such as limited access to quality health care, low income and occupational status, and legal status may erode the health advantage of the undocumented at a faster pace than their documented counterparts.

- Findings from the 2009 California Health Interview Survey provide mixed evidence for the health advantage of undocumented immigrants. Specifically, after adjusting for age and

gender, we found that undocumented immigrants in California were significantly less likely to have ever been diagnosed with asthma than naturalized and US-born citizens. However, there are no significant differences in diagnoses of heart disease, diabetes or high blood pressure for undocumented immigrants compared to other groups. Undocumented immigrants are also significantly less likely to report excellent or very good health compared to documented immigrants, naturalized citizens and US-born citizens.

Access to Health Care

- Health insurance coverage is lower for undocumented immigrants than US-born citizens and other US immigrant groups.

- Significant barriers to health care face undocumented immigrants, including low socio-economic status, difficulty negotiating time off of work, lack of transportation and language barriers.

- Fewer health services are used by undocumented immigrants than US-born citizens or other immigrant groups. After adjusting for age and gender differences between groups, we estimate that undocumented immigrants in California were significantly less likely to have any doctor visits in the past year compared to naturalized and US-born citizens.

- Emergency department (ED) services; despite the popular conception that undocumented immigrants use more ED care, we estimate that undocumented immigrants are significantly less likely than naturalized citizens and U.S.-born citizens to visit the emergency department.

Financial impact of care for undocumented immigrants

- Health care costs for undocumented immigrants are difficult to assess, particularly at the provider level. Most providers do not collect citizenship information on patients, and the costs of care for the undocumented are often classified simply as uncompensated care.

- Self-reported data or Emergency Medicaid expenditures are more reliable; these data sources suggest that costs for undocumented immigrants are generally lower than for US citizens and other immigrant groups.

- Undocumented immigrants rely heavily on safety-net health care providers, including community health centers and clinics, although costs attributed to undocumented immigrants at federally qualified health centers and clinics are difficult to estimate. Community health centers an important role in implementing the Affordable Care Act, including continuing to provide care to undocumented immigrants. While the ACA provides for additional funding for community health centers, perhaps allowing for expanded primary care access for undocumented immigrants, recent budget cuts have offset ACA funding to some degree.

- Hospitals are required by federal law to treat those with life threatening conditions without regard to insurance coverage. As a result, the costs of emergency care and other treatment for undocumented immigrants without insurance usually becomes uncompensated care. This will

be an increasing concern under the ACA since supplemental payments to Disproportionate Share Hospitals (DSH) will decline which have historically assisted with uncompensated care costs. A small increase in coverage for life-threatening conditions for undocumented immigrants may occur under Emergency Medicaid in states that expand Medicaid coverage to all low-income adults regardless of family status. In states that fail to fully expand their Medicaid programs, the loss of DSH funding combined with continued uncompensated care for undocumented patients under EMTALA is likely to further stain the safety net.

Impact on access of the exclusion of undocumented immigrants from the ACA

- Uninsurance rates based on the Gruber MicroSimulation Model (GMSIM) estimate that there will be a negligible change in the uninsurance rates of undocumented immigrants. Nationally, their share of all uninsured ages 0-64 is projected to rise from about 10% to 25% as a result of the improved coverage of the rest of the population.

- Impacts of the ACA on health insurance for undocumented populations will likely vary by state. For example, an estimated 1.2 million undocumented immigrants are expected to remain uninsured in California once ACA is fully implemented or 41% of the total uninsured in the state, compared with 25% nationwide. In contract, New York is estimated to have the third largest number of uninsured undocumented immigrants in the country, 265,000, which will account for an estimated 16% of that state's total undocumented population.

Policy options to address access to care barriers for undocumented immigrants

- It may be possible to design programs that focus on those left out of health care reform generically, including those who are US citizens and permanent residents, that will also benefit the undocumented.

Abstract

The undocumented population is the largest group explicitly excluded from the Patient Protection and Affordable Care Act (ACA). This report provides a comprehensive review of the literature on the health and health care of undocumented immigrants in the US and new data from the 2009 California Health Interview Survey and the Gruber MicroSimulation Model. Existing research consistently finds undocumented immigrants with low rates of health insurance and health services use, and a heavy reliance on safety net providers. California data reinforce national trends on low coverage, access, and use, with findings of mixed advantages and disadvantages in health status. MicroSimulation models show undocumented immigrants will continue to have low health insurance coverage under the ACA; 5.1 million undocumented immigrants will be uninsured by 2016. Given the exclusion of most undocumented residents from health insurance, we review policy options for improving coverage, access to care and health-related services for this population.

Overview of the Patient Protection and Affordable Care Act

The Patient Protection and Affordable Care Act (ACA), was signed into law by President Obama in 2010 (United States Congress 2010) and was in large part upheld by the Supreme Court of the United States in their June 2012 decision (132 S. Ct. 2566). The components of the ACA that will impact access to health care once fully implemented in 2014 are that it requires most US citizens and legal permanent residents to have health insurance coverage to avoid paying a special tax. Subsidies will be provided to those with lower incomes to make insurance affordable. Businesses will also have to pay a special tax if they do not provide health insurance, with subsidies for small businesses. The ACA provides for the creation of state-based health exchanges through which individuals and small businesses can purchase coverage with (and without) subsidies, and for state-options to expand Medicaid in order to provide health coverage to a larger group of low-income individuals. Despite the far-reaching expansion of health care coverage for the large number of uninsured individuals in the US, the ACA explicitly excludes undocumented immigrants from purchasing health insurance coverage through the health exchanges. In addition, undocumented immigrants continue to be ineligible for most public forms of health insurance coverage and would not benefit from any Medicaid expansions carried out by the states. The undocumented could conceivably benefit from expanded employer coverage resulting from the incentives for coverage, as well as from the expansion of community health centers funded by the ACA. The net impact on access to care for undocumented immigrants will depend on their need for care, resources, and the response to the ACA by business and the states, as described in this report.

Section I. Overview of the undocumented immigrant population in the United States

a. Demographic characteristics

Most of the current estimates of the number of undocumented immigrants living in the United States are derived from Current Population Survey (CPS) data. The most widely used data are published by the Pew Hispanic Center and serve as the basis for much of the health and health policy research on this population. The most recent estimates suggest that 11.2 million undocumented immigrants resided in the United States in 2010. There has been an overall increase in the undocumented population over time, with a marked acceleration in the early 2000s, from 8.4 million in 2000 to a peak of 12 million in 2007 (Passel and Cohn 2011).

However, since the start of the most recent economic recession, there is evidence that the undocumented population declined by 800,000 individuals between 2007 and 2010. This trend is largely driven by a "standstill" in the flow of undocumented Mexican migrants to the US; there were an estimated 6.5 million undocumented Mexican immigrants living in the US in 2010 compared with 7 million in 2007 and there was evidence of further decline in 2011 (Passel and Cohn 2011; Passel, Cohn and Gonzalez-Barrera 2012). Immigrants from Mexico still account for 58% of the undocumented followed by immigrants from the rest of Latin America (23%), Asia (11%), Europe and Canada (4%) and Africa and other nations (3%) (Exhibit 1).

Exhibit 1. Estimated US Unauthorized Immigrant Population by Region and Country of Birth, 2010

Region/Country of Birth	Number[a]	Percent
Mexico	6,500,000	58
Other Latin America	2,600,000	23
Asia	1,300,000	11
Europe & Canada	500,000	4
Africa & Other	400,000	3
Total	11,200,000	100

Data source: Pew Hispanic Center estimates based on augmented March Supplements to the Current Population Survey (Passel and Cohn 2011)
Note: a. Numbers do not add up to total due to rounding.

There are several factors that help explain changes in the size and composition of the undocumented population over time. For one, trends in the undocumented population are closely linked to changes in the labor market given the over-representation of the undocumented in the job force (Preston 2009). Eight million of the 11.2 million undocumented immigrants are in the labor force; in 2010 the undocumented accounted for 5.2% of the US labor force although they comprised only 3.7% of the total US population (Passel and Cohn 2011). Labor demand changes in sectors where the undocumented tend to concentrate—service, construction, agriculture, and leisure and hospitality—help determine the size of the undocumented population (Passel and Cohn 2009). Contractions within the construction and service sectors during the current economic recession may account for recent declines in the number of undocumented immigrants living in the US.

Other factors that contribute to the size and composition of the undocumented population in the US include demographic and economic factors in sending countries, in particular Mexico and other Latin American countries (Passel, Cohn and Gonzalez-Barrera 2012). Greater economic stability and more opportunity for employment and economic mobility in sending countries can contribute to less undocumented immigration and incentivize staying in places of origin. Falling fertility rates in traditional sending countries such as Mexico have also contributed to the decline in migration to the US, including undocumented migration (Passel, Cohn and Gonzalez-Barrera 2012).

Stricter immigration enforcement may deter undocumented entry into the US, but also contributes to longer stays among undocumented immigrants who managed to enter the country. Perhaps in part due to the growing difficulty of crossing the border, the average length of stay has increased over the last decade for undocumented immigrants. In 2010, 35% of undocumented immigrants had been in the US for 15 years or more compared with only 16% in 2000 (Taylor et al. 2011). Family reunification policies can also influence the size and composition of the immigrant population that enters as undocumented. Long wait times required for the legal immigration of immediate family members of both US-citizen and permanent residents often make undocumented immigration a more attractive option for family

reunification; wait times for the highest priority relatives –spouses and children – average 4 to 6 years for Mexico and the Philippines.

b. Children of undocumented immigrants

In addition to considering the undocumented immigrant population directly, studies of health and health policy related to undocumented immigration must also take into account the estimated 5.5 million children of undocumented immigrants. About half of undocumented adults live with their own children under age 18, compared with 21% of the US-born and 35% of documented immigrants. Children account for a significant portion of the undocumented population overall; in 2010 one million undocumented immigrants were children under the age of 18 (Passel and Cohn 2011). However, the majority (73%) of children of undocumented immigrants are US-born citizens (Passel and Cohn 2009). These citizen-children form part of "mixed-status" families, which refer to families that include both undocumented and US citizen members. The number of children in mixed status families – with undocumented parents and US citizen children – has increased rapidly, from 2.1 million in 2000 to 4.5 million in 2010 (Passel and Cohn 2011). Put differently, 82% of children of undocumented immigrants are in mixed-status families.

c. *Geographic dispersion*

Undocumented immigrants have historically concentrated in California, Texas, Florida and New York; half of the undocumented population lives in these traditional receiving states (Passel and Cohn 2011). In addition, the majority of undocumented immigrants live in metropolitan regions of the United States. Based on March 2008 CPS data, about 94% of undocumented immigrants lived in metropolitan regions compared with 80% of the US-born; nearly half of undocumented immigrants live in the central cities in these metropolitan regions (e.g. Los Angeles, New York City, Miami, Houston) compared with one-third of the US-born population (Passel and Cohn 2009).

While the undocumented continue to concentrate in these historical receiving centers, they have also become increasingly dispersed throughout the United States, entering so-called "new destination" states. For example, New Jersey and Illinois were each home to around 500,000 undocumented immigrants in 2010; around 400,000 lived in both Georgia and Arizona in the same year. The proportion of undocumented immigrants living in these new receiving states doubled from 1990 to 2008, from 14% to 32% of all undocumented immigrants in the US, while California's share of the undocumented fell from 42% to 22% during the same period (Passel and Cohn 2009).

Several states including Colorado, Florida, New York, and Virginia have experienced statistically significant declines in the number of undocumented immigrant residents between 2007 and 2010, paralleling the national decrease in the undocumented immigrant population. Three Mountain West states (Arizona, Utah and Nevada collectively) also experienced a significant decline in the undocumented population, from 850,000 in 2007 to 700,000 in 2010. On the other hand, the states of Louisiana, Oklahoma and Texas combined experienced a significant increase in undocumented immigrants during the same period (Passel and Cohn 2011)

Section II. Undocumented immigrants in the California context

Nearly 23% of the 11.2 million undocumented immigrants in the US were estimated to live in California in 2010 (Passel and Cohn 2011). Given the historical concentration of the undocumented immigrant population in California, this report highlights demographic, health and health care statistics for the state using data from the 2009 California Health Interview Survey (CHIS). CHIS is a population-based, telephone survey of California residents and includes a measure of immigration status which allows comparisons between US-born citizens, naturalized immigrants, legal permanent residents and undocumented immigrants. Using these data, we estimate that there were nearly 1.8 million undocumented immigrants aged 18 to 64 years living in California in 2009 (Exhibit 2). We exclude the approximately 10% of undocumented immigrants who are children in our California analysis since their patterns of health status, access to care, and insurance sources are very different than that of nonelderly adults. In addition, in California there have been a number of initiatives to provide health insurance coverage for undocumented children, making their experience different from both undocumented adults and undocumented children in most other states. Among nonelderly undocumented adults in California, there were an equal proportion of men and women, and, parallel to national trends, undocumented immigrants were younger on average compared to US-born citizens and other immigrant groups.

Based on 2009 data, undocumented immigrants in California are predominately Latino (84.7%) and Asian (12.5%). More specifically, 70.5% were from Mexico, 13.8% were from Central America, and 13.5% were from a country in Asia or the Pacific Islands (Exhibit 2). In contrast, other immigrant groups (naturalized citizens or otherwise documented) had higher proportions of Asian or non-Latino whites (e.g. European) migrants. In terms of geographic dispersion of the undocumented population in California, 60.7% of undocumented immigrants live in Southern California, while the remaining nearly 30% were split almost evenly between Northern and Central California.

Undocumented immigrants in California experience disproportionately high rates of poverty; well over half of undocumented immigrants lived below the federal poverty line in 2009 compared to a third of documented immigrants and only 11% of US-born and naturalized citizens (Exhibit 2). Undocumented immigrants in California have relatively low levels of education; more than half of adults 18-64 in this group did not have a high school diploma compared with about 43.3% of documented immigrants, 20.5% of naturalized citizens and 6.4% of US-born citizens. Finally, undocumented immigrants were more likely to have difficulty with English than other immigrant groups; nearly three-quarters did not speak English at all or well compared to approximately half of documented immigrants and a quarter of naturalized citizens.

Our analysis of family characteristics based on the 2009 CHIS shows that undocumented immigrants were more likely to have children than U.S.-born citizens, although there were fewer significant differences compared with naturalized citizens or other documented immigrants. Specifically, undocumented immigrants were significantly more likely to be married with children (48.5% vs. 26.3%) or to be single with children (12.3% vs. 5.7%) compared to U.S.-born citizens. Undocumented immigrants were also significantly less likely than U.S. born citizens to live alone (29.2% vs. 37.5%) (Exhibit 2).

Exhibit 2. Adult Population, Ages 18 -64 Years, in California by Selected Characteristics and Citizenship and Immigration Status, California Health Interview Survey, 2009

Selected Characteristics	Citizenship/Immigration Status			
	US-Born Citizen (N=15,393,000) % (95% CI)	Naturalized Citizen (N=3,866,000) % (95% CI)	Documented Immigrant (N=2,435,000) % (95% CI)	Undocumented Immigrant (N=1,782,000) % (95% CI)
Gender				
Female	50.2 (48.6; 51.7)	50.4 (47.0; 53.8)	48.8 (44.0; 53.6)	50.2(44.6; 55.8)
Age (years)				
18-24	21.4 (19.9; 22.9)	6.2 (4.7; 7.7)	7.2 (5.5; 8.8)	10.3 (8.1; 12.5)
25-34	18.6 (17.3; 20.0)	15.2 (11.7; 18.6)	22.6 (18.2; 26.9)	43.6 (37.8; 49.4)
35-44	19.1 (17.8; 20.4)	26.0 (23.1; 29.0)	37.3 (32.1; 42.4)	34.6 (29.5; 39.7)
45-64	40.8 (39.4; 42.2)	52.6 (49.2; 56.0)	33.0 (29.1; 36.9)	11.4 (8.1; 14.7)
Total	100.0	100.0	100.0	100.0
Federal Poverty Level				
0-99% FPL	11.2 (9.9; 12.4)	11.5 (9.8; 13.3)	31.6 (26.4; 36.7)	56.6 (51.1; 62.2)
100-199% FPL	13.5 (12.4; 14.6)	22.3 (19; 25.5)	30.9 (26.7; 35.2)	21.5 (17.7; 25.2)
200-299% FPL	13.6 (12.6; 14.7)	16.9 (14.3; 19.6)	11.1 (8.9; 13.4)	8.7 (5.6; 11.8)
≥ 300% FPL	61.7 (60.2; 63.3)	49.3 (45.9; 52.6)	26.4 (22.4; 30.4)	13.2 (8.2; 18.1)
Total	100.0	100.0	100.0	100.0
Educational Attainment				
Less than High School	6.4 (5.4; 7.4)	20.5 (17.6; 23.4)	43.3 (38.3; 48.2)	51.6 (46.0; 57.2)
High School	27.6 (26.2; 29)	19.9 (17.6; 22.2)	21.4 (17.3; 25.4)	25.2 (20.8; 29.5)
Some College	29.4 (28.0; 30.9)	17.9 (14.9; 20.8)	12.0 (9.7; 14.4)	7.6 (5.2; 9.9)
Bachelor's or more	36.6 (35.2; 37.9)	41.7 (38.5; 45)	23.4 (19.6; 27.1)	15.7 (10.3; 21.1)
Total	100.0	100.0	100.0	100.0
English use and proficiency				
Native speaker/very well	94.6 (93.8; 95.4)	45.4 (42.1; 48.8)	24.8 (20.5; 29.1)	8.1 (4.9; 11.3)
Well	5.1 (4.3; 5.9)	30.4 (27.2; 33.5)	22.6 (18.9; 26.4)	17.4 (12.8; 22.0)
Not well/not at all	0.3 (0.1; 0.4)	24.2 (21.5; 26.9)	52.6 (47.8; 57.4)	74.5 (69.4; 79.7)
Total	100.0	100.0	100.0	100.0
Race/ethnicity				
White, Non-Latino	60.8 (59.2; 62.4)	15.9 (13.9; 17.9)	11.7 (8.9; 14.5)	2.0 (1.4; 2.6)
Latino	22.3 (20.9; 23.8)	42.8 (39.4; 46.2)	65.8 (61.3; 70.3)	84.7 (80; 89.4)
Black, Non-Latino	7.4 (6.6; 8.3)	2.3 (1.3; 3.2)	2.4 (0.4; 4.3)*	0.6 (0.0; 1.3)*
Asian, Non-Latino	5.9 (4.9; 7.0)	37.7 (34.5; 41.0)	19.0 (15.5; 22.6)	12.5 (7.8; 17.1)
Other	3.5 (3.0; 4.0)	1.3 (0.6; 2.0)	1.0 (0; 2.1)*	0.3 (0.0; 0.5)*
Total	100.0	100.0	100.0	100.0
Country of birth				
United States	100.0	--	--	--
Mexico	--	33.9 (30.5; 37.3)	52.6 (47.8; 57.5)	70.5 (64.9; 76)
Central America	--	7.1 (5.5; 8.6)	10.3 (7.7; 12.9)	13.8 (9.7; 17.9)
Other Latin American country	--	4.6 (3.3; 5.8)	3.1 (1.2; 5.1)*	0.6 (0.2; 0.9)*
Asia or Pacific Island	--	44.3 (41; 47.6)	22.1 (18.2; 25.9)	13.5 (8.8; 18.2)
Other	--	10.2 (8.7; 11.7)	11.9 (8.8; 14.9)	1.7 (1.1; 2.2)
Total	100.0	100.0	100.0	100.0

*Estimate is unstable based on a coefficient of variation ≥ 0.30.

Exhibit 2 (cont). Adult Population, Ages 18 -64 Years, in California by Selected Characteristics and Citizenship and Immigration Status, California Health Interview Survey, 2009

Selected Characteristics	Citizenship/Immigration Status			
	Citizen (N=15,393,000) % (95% CI)	Naturalized Citizen (N=3,866,000) % (95% CI)	Documented Immigrant (N=2,435,000) % (95% CI)	Undocumented Immigrant (N=1,782,000) % (95% CI)
Family size				
One person	37.5 (35.9; 39.1)	24.6 (21.3; 27.9)	19.6 (15.2; 23.9)	29.2 (23.2; 35.2)
2-4 people	54.1 (52.5; 55.7)	64.4 (60.7; 68.0)	65.2 (60.5; 69.9)	49.7 (44.1; 55.3)
5 or more	8.4 (7.6; 9.2)	11.0 (8.0; 14.1)	15.2 (12.2; 18.2)	21.1 (17.3; 24.9)
Total	100.0	100.0	100.0	100.0
Region in California				
Northern	31.1 (29.8; 32.4)	28.4 (25.5; 31.3)	25.3 (20.9; 29.7)	20.4 (16.0; 24.8)
Central	16.8 (15.9; 17.6)	10.3 (9.0; 11.7)	16.2 (13.2; 19.2)	18.9 (15.1; 22.6)
Southern	52.2 (50.7; 53.7)	61.2 (58.1; 64.3)	58.5 (53.8; 63.3)	60.7 (55.4; 66.0)
Total	100.0	100.0	100.0	100.0

*Estimate is unstable based on a coefficient of variation ≥ 0.30.

We examined work status separately for men and women and found work status patterns that varied widely by legal status and gender. Among men, nearly three-quarters of undocumented immigrants worked full time; only 5.0% of undocumented immigrant men were unemployed and not looking for work compared to 15.2% of U.S.-born and 10.4% of naturalized citizens (Exhibit 3). However, undocumented immigrant women were significantly more likely to be out of the labor force compared to U.S.-born and naturalized citizens (51.9% vs. 25.3% and 22.5%, respectively).

Exhibit 3. Work Status of Adults, Ages 18 -64 years, in California by Gender and Citizenship and Immigration Status, California Health Interview Survey, 2009

Selected Characteristics	Citizenship/Immigration Status			
	Citizen (N=15,393,000) % (95% CI)	Naturalized Citizen (N=3,866,000) % (95% CI)	Documented Immigrant (N=2,435,000) % (95% CI)	Undocumented Immigrant (N=1,782,000) % (95% CI)
Female				
Works full time (21+hrs/wk)	51.8 (49.6; 53.9)	58.7 (54.8; 62.5)	43.8 (38.5; 49.1)	29.0 (23.7; 34.3)
Works part time (≤ 20 hrs/wk)	13.5 (12; 14.9)	12.2 (9.4; 14.9)	11.7 (8.9; 14.5)	10.6 (6.8; 14.3)
Unempl., looking for work	9.5 (7.5; 11.4)	6.7 (4.8; 8.7)	11.5 (7.5; 15.6)	8.5 (5.5; 11.5)
Unempl., not looking for work	25.3 (23.6; 27)	22.5 (19.4; 25.5)	33.0 (28.5; 37.6)	51.9 (44.8; 59)
Total	100.0	100.0	100.0	100.0
Male				
Works full time (21+hrs/wk)	65.9 (63.8; 68.0)	72.3 (66.6; 78.0)	77.6 (71.7; 83.5)	74.5 (66.1; 82.9)
Works part time (≤ 20 hrs/wk)	8.2 (7.0; 9.4)	5.0 (3.3; 6.8)	3.9 (2.1; 5.7)	7.1 (3.5; 10.6)
Unempl., looking for work	10.6 (9.1; 12.2)	12.2 (6.7; 17.7)	9.5 (5.1; 13.8)	13.4 (5.1; 21.8)
Unempl., not looking for work	15.2 (13.8; 16.7)	10.4 (7.2; 13.7)	9.0 (5.1; 12.9)	5.0 (3.0; 7.0)
Total	100.0	100.0	100.0	100.0

Section III. Health status and conditions

a. Overview

Over 80% of undocumented immigrants in the US are Latino, either from Mexico or other Latin American countries. Studies of Latino immigrant health in general suggest that this group has better health status and lower rates of risky health behaviors compared to the US-born. However, there are gaps in our understanding of how the effects of poor access to health care and other adversities faced by undocumented immigrants may adversely impact their health status (Suárez-Orozco et al. 2011). Factors associated with undocumented status may chip away at the health advantages that immigrants have upon arrival. Specifically, limited access to quality health care (Heyman, Nunez and Talavera 2009), increased vulnerability due to low income and occupational status (Marin et al. 2009; Nalini Junko 2011), and the stressors associated with undocumented status such as fear of deportation (Berk and Schur 2001; Hacker et al. 2011) may erode the health advantage of the undocumented at a faster pace than their documented counterparts. In addition, undocumented immigrants with chronic and infectious health conditions are at a disadvantage due to poor access to care; these health conditions may be allowed to progress without detection or treatment due to significant barriers to health care access (Achkar et al. 2008; Coritsidis et al. 2004; Dang, Giordano and Kim 2012).

One of the most striking examples of the erosion of health advantages for undocumented immigrants involves the perinatal health of undocumented women and their US-born children. As with much of the health literature, several studies have found that undocumented women engage in fewer health risk behaviors while pregnant (e.g. lower rates of prenatal smoking and drinking) and appear to have lower rates of low-birth weight or preterm babies (Dang et al. 2011; Kelaher and Jessop 2002; Korinek and Smith 2011; Reed et al. 2005). However, the beneficial effects of better health behaviors during pregnancy can be counteracted by the effects of lower rates of prenatal care among undocumented immigrants; less prenatal care may lead to a higher risk for adverse perinatal outcomes (e.g. prenatal anemia, complications of delivery, or abnormal conditions of the newborn) for both undocumented women and their US-born children.

This pattern was found in an analysis of birth data from a California university hospital. Lu et al. (2000) found that undocumented women without prenatal care were almost four times as likely to deliver a low birth weight baby and over seven times as likely to deliver prematurely compared with undocumented women with any prenatal care. In another example, Reed et al. (2005) analyzed 1998-1999 birth certificate data women in Colorado. Many undocumented women did not receive adequate prenatal care; nearly half did not receive the optimal number of prenatal care visits, compared with one fifth of documented women. In addition, undocumented women were more likely to be anemic and less likely to gain sufficient weight during pregnancy – outcomes associated with poorer prenatal care. Finally, undocumented women were more likely to have complications of delivery, such as fetal distress and abnormal conditions (e.g. infant anemia, seizures, and need for assisted ventilation). These outcomes are commonly linked to inadequate prenatal care and the consequent limitations in monitoring and preventative care and under-preparation for labor and delivery.

Lack of prenatal care may pose an additional, indirect risk to the children of undocumented immigrants. Prenatal care can serve as a "gateway" to the health care system, including pediatric care, for immigrant families. Lack of prenatal care may serve as a significant

barrier to gaining access and information about other types of health care, including for US born children (Korinek and Smith 2011).

In addition, stressors related to undocumented status, such as fear of deportation or experiences of discrimination and stigma can also have an adverse effect on the physical and mental health of undocumented immigrants, with potential ramifications for their US-born children (Cavazos-Rehg, Zayas and Spitznagel 2007; DeLuca, McEwen and Keim 2010; Hacker et al. 2011; Ortega et al. 2009; Suárez-Orozco et al. 2011; Sullivan and Rehm 2005). Children of undocumented immigrants, including children with US citizenship, may suffer from fear and anxiety over the potential deportation of themselves, or their undocumented parents and siblings (Potochnick and Perreira 2010; Suárez-Orozco et al. 2011). The U.S. Department of Homeland Security reports that between 1998 and 2007, over 100,000 individual parents of U.S. citizen-children were removed from the United States, with many facing repeated removals due to return migration over the 10-year period (US Department of Homeland Security 2009). In the first half of 2011 alone, U.S. Immigration and Customs Enforcement removed or deported over 46,000 immigrants with at least one U.S. citizen child (US Department of Homeland Security 2012). Actual deportation and detention of undocumented parents poses grave risks to the well-being of their children. Chaudry et al. (2010) report findings from a qualitative study of 85 immigrant families that experienced the arrest of at least one parent by immigration authorities, including workplace raids. In interviews six months after the arrest, parents reported an increase in their children's behavioral problems (e.g. eating and sleeping problems, fear and anxiety) speech and developmental concerns, and declines in school performance. Many of these concerns persisted at follow-up interviews nine months or more after the arrests, and particularly for those children with a detained or deported parent.

b. The California context

Our findings from the 2009 California Health Interview Survey (CHIS) challenge the idea that undocumented immigrants in California have an unqualified health advantage relative to US-born citizens or other immigrant groups. Because undocumented immigrants are generally younger and more likely to be male than the general population, we adjust for age and gender in all of our estimates so that the rates of health status and health care use reflect the trends when all populations have the same age/gender structure. In our analysis, undocumented immigrants are significantly less likely to report optimal self-rated health (unadjusted results available in the appendix). Specifically, we estimate that 78.8% of undocumented immigrants in this California-based analysis reported being in poor, fair, or good overall health (versus very good or excellent health), compared to 69.9% of documented immigrants, 55.2% of naturalized citizens and 43.2% of U.S.-born citizens (see Exhibit 4). It may be that the stressors that undocumented immigrants face partially explain the results about their less optimal health status. This is suggested by a study of Mexican-origin adults in Fresno, California which found that legal status stress, defined by fear of deportation, avoidance of immigration officials, difficulty finding legal services and limited contact with family and friends because of legal status, was associated with a significantly higher likelihood of reporting fair or poor physical health status, even when controlling for indicators of access to health care (Finch and Vega 2003).

In addition, there are little reliable data comparing chronic and infectious disease rates among the undocumented and other groups in the published literature. Using the 2009 CHIS data, we estimated that, adjusting for age and gender, undocumented immigrants would be

significantly less likely to ever have been diagnosed with asthma than naturalized or U.S.-born citizens (3.2% vs. 7.9% and 16.3%, respectively) (Exhibit 4).

Based on the same adjusted models, we estimate that 9.2% of undocumented immigrant adults in California had ever been diagnosed with diabetes, 7.4% ever diagnosed with heart disease, and 24.8% ever diagnosed with high blood pressure, although none of these estimates are significantly different than those for other US-born and documented immigrant groups (Exhibit 4). The significant differences in the estimates of lifetime asthma diagnosis, with undocumented immigrants appearing to have lower rates, may be due in part to the under-diagnosis of health conditions among undocumented immigrants in particular, given their relatively lower access to regular sources of health care. The potential for under-diagnosis of health conditions for undocumented immigrants may mean that estimates of diagnosed diabetes, heart disease and high blood pressure are underestimates as well. Finally, we note the importance of taking into account age and gender when calculating these estimates. For example, in our unadjusted model (Exhibit A1) undocumented immigrants appear to have significantly lower rates of diagnosed diabetes than naturalized and documented immigrants. Similarly, their rates of high blood pressure appear to be lower than naturalized and US-born citizens in the unadjusted model. These differences disappear when we adjust for age and gender.

Exhibit 4. Age- and Gender-Adjusted Predicted Percent of the Health Status of Adults Ages 18-64 years by Citizenship and Immigration Status, California Health Interview Survey, 2009

	Citizenship/Immigration Status			
	U.S.-Born Citizen (N=15,393,000) % (95% CI)	Naturalized Citizen (N=3,866,000) % (95% CI)	Documented Immigrant (N=2,435,000) % (95% CI)	Undocumented Immigrant (N=1,782,000) % (95% CI)
Health Status				
Fair, Poor, or good health	43.2 (41.7; 44.6)	55.2 (52.0; 58.4)	69.9 (65.8; 74.1)	78.8 (74.4; 83.2)
Very good or excellent health	56.8 (55.4; 58.3)	44.9 (41.7; 48.1)	30.1 (25.9; 34.2)	21.2 (16.8; 25.6)
Ever had asthma*	16.3 (15.3; 17.3)	7.9 (6.3; 9.6)	5.4 (3.7; 7.1)	3.2 (1.8; 4.5)
Diabetes*	6.7 (5.8; 7.5)	9.0 (7.1; 11.0)	15.7 (10.5; 21.0)	9.2 (5.9; 12.4)
Heart Disease*	4.3 (3.7; 4.9)	3.2 (2.4; 4.1)	5.3 (3.2; 7.3)	7.4 (1.2; 13.2)
High Blood Pressure*	26.5 (25.3; 27.8)	25.1 (22.2; 28.0)	25.2 (20.6; 29.8)	24.8 (18.8; 30.9)

*Told by a health professional that they had this condition.

The health status advantage observed for Latino immigrants, and undocumented immigrants in particular, are often explained in other studies by the fact that this group engages in fewer health-risk behaviors when compared to US-born citizens (Ortega et al. 2007; Reed et al. 2005). We found mixed evidence for this claim based on our analysis of the 2009 California Health Interview Survey (CHIS). There are some indicators of fewer health risk behaviors for undocumented immigrants compared with other groups. Adjusting for age and gender, we estimated that undocumented immigrants are significantly less likely to binge on alcohol two or more times in the past year than U.S.-born citizens (12.6% vs. 27.2%) (Exhibit 5). We estimate

that undocumented immigrants are less likely to be current smokers than US-born citizens (10.9% vs. 14.5%) and less likely to be in the highest quartile of weekly unhealthy food consumption, including soda, fast food, French fries, and sweets (24.0% vs. 29.9%), although neither of these differences are statistically significant. However, we estimate that undocumented immigrants in California are more likely than documented immigrants, and naturalized and U.S.-born citizens to be in the lowest quartile of weekly fruit and vegetable consumption (37.8% vs. 29.1%, 28.0% and 29.1%, respectively). Adjusting for age and gender, we also predict that undocumented immigrants are more likely to be obese than documented immigrants, and naturalized and U.S.-born citizens (30.4% vs. 23.2%, 19.2%, and 25.5%, respectively), although these differences were mostly not statistically significant. Again we note the importance of adjusting for age and gender. In the unadjusted model (Exhibit A2) obesity rates for undocumented immigrants are lower (25.8%) due to the high proportion of males and the younger age structure of this group.

Much of the research on health outcomes for children of undocumented immigrants has come from California-based studies. In a study connecting undocumented parents' legal stress to child outcomes Ortega and authors (2009) analyzed 2005 CHIS data, finding that undocumented Mexican children were 50% more likely to be at developmental risk compared to US-born or otherwise authorized Mexican and non-Latino white children. In this case, parents reported their children's developmental risk on a 10-item scale measuring academic, cognitive, behavioral, and language skills. The authors suggest that this greater developmental risk might be related to additional family stress over fear and marginalization. In part, reduced or delayed access to primary pediatric healthcare might also contribute to reduced information among undocumented parents about normal childhood development trajectories as well as development-promoting activities.

Exhibit 5. Age- and Gender-Adjusted Predicted Percent of Various Health Behaviors of Adults, Ages 18-64 Years, by Citizenship and Immigration Status, California Health Interview Survey, 2009

	Citizenship/Immigration Status			
	Citizen (N=15,393,000) % (95% CI)	Naturalized Citizen (N=3,866,000) % (95% CI)	Documented Immigrant (N=2,435,000) % (95% CI)	Undocumented Immigrant (N=1,782,000) % (95% CI)
Current Smoker	14.5 (13.5; 15.5)	8.6 (6.8; 10.3)	11.3 (8.5; 14.1)	10.9 (7.6; 14.3)
Binge drinker[1]	27.2 (25.9; 28.6)	14.4 (12.3; 16.5)	13.7 (11.0; 16.5)	12.6 (9.6; 15.5)
Lowest consumption of healthy food[2]	29.1 (27.6; 30.5)	28.0 (24.8; 31.2)	29.1 (25.0; 33.3)	37.8 (32.3; 43.4)
Highest consumption of unhealthy food[3]	29.9 (28.4; 31.3)	18.9 (16.1; 21.6)	21.8 (18.2; 25.5)	24.0 (19.6; 28.5)
Weight				
Underweight/Normal	38.8 (37.4; 40.1)	47.7 (44.7; 50.6)	41.8 (38.2; 45.3)	33.1 (28.1; 38.0)
Overweight	35.8 (34.5; 37.2)	33.2 (31.6; 34.8)	35.1 (33.5; 36.7)	36.5 (35.1; 37.9)
Obese	25.5 (24.2; 26.8)	19.2 (17.2; 21.1)	23.2 (20.5; 25.8)	30.4 (25.7; 35.1)

[1] Someone who has binged 2 or more times in the past year. For a man, bingeing refers to drinking 5 or more alcoholic drinks in a day and for a woman it refers to drinking 4 or more alcoholic drinks in a day.
[2] Lowest quartile of consumption of fruits and vegetables per week.
[3] Highest quartile of consumption of soda, fast food, French fries, cakes, cookies, pies, ice cream, and frozen desserts per week.

Overall, there are significant gaps in the literature on the health status of the undocumented population in the United States. For one, the majority of studies related to the health and health care access of undocumented immigrants in the Unites States focus on Latinos. This is largely due to the fact that the undocumented population is overwhelmingly from Latin America—and Mexico in particular. However, this means that findings may not be generalized to the entire undocumented population, they instead refer to those Latin American migrants who make up the majority (81%) of the undocumented in the United States. Additionally, there is a dearth of information on chronic health conditions among the undocumented, although this analysis of the 2009 California Health Interview Survey helps fill this gap. Still, there is little understanding of how lack of access to adequate health care will adversely impact the health status of undocumented immigrants and their children over time. As undocumented immigrants age, understanding chronic disease risk factors and outcomes will be increasingly important. In addition, little is known about the long-term health of the children of undocumented immigrants, particularly related to the adverse effects of inadequate prenatal care and the stressors related to undocumented status that can negatively impact children regardless of their own legal status.

Section IV. Access to Health Care

a. Overview of health insurance coverage

Undocumented immigrants have lower rates of health insurance coverage compared with any other immigrant group in the United States. In an analysis of the US Current Population Survey Zuckerman and colleagues (2011) find that between 1999 and 2007, 57% of undocumented immigrants were uninsured, a rate that remained stable across the eight years under analysis. By comparison, 34% of legal permanent residents (LPRs), 19% of naturalized citizens and 14% of US-born were uninsured across the same time. Among undocumented immigrants who did have health insurance, about 35% had private coverage and less than 10% reported a source of public coverage. There are several factors driving the low rate of health insurance coverage among immigrants. For one, undocumented immigrants are excluded from receiving many public sources of health insurance, including Medicaid and Medicare. Secondly, undocumented immigrants concentrate in low-wage jobs in industries that are less likely to offer health benefits (Zuckerman, Waidmann and Lawton 2011). Given the high rates of poverty among undocumented families, there are significant financial barriers to acquiring private coverage when not offered by employers

b. Health insurance coverage in the California context

We found very similar rates in California as nationally of uninsurance by immigration status using 2009 CHIS data. Adjusting for age and gender, we estimate that 51.2% of undocumented immigrants between the ages of 18-64 are uninsured compared to 34.8% of documented immigrants, 19.1% of naturalized citizens, and 16.0% of U.S.-born citizens (Exhibit 6). These differences were statistically significant. Undocumented immigrants are significantly more likely to have public non-HMO health insurance (e.g. Medicaid fee-for-service (FFS)) than documented immigrants and U.S.-born and naturalized citizens (15.8% vs. 8.2%, 6.4%, and 6.7%, respectively) (Exhibit 6). This may be the result of emergency Medicaid being provided through FFS being more often accessed by undocumented immigrants. Furthermore, they are significantly less likely to be covered through private HMO insurance, which comes primarily from employers, than the aforementioned groups (13.1% vs. 27.8%, 48.5% and 41.0%, respectively).

Exhibit 6. Age- and Gender-Adjusted Predicted Percent of Health Insurance Coverage among Adults, Ages 18-64 Years, by Citizenship and Immigration Status, California Health Interview Survey, 2009

	Citizenship/Immigration Status			
	U.S.-born Citizen (N=15,079,000) % (95% CI)	Naturalized Citizen (N=3,771,000) % (95% CI)	Documented Immigrant (N=2,369,000) % (95% CI)	Undocumented Immigrant (N=1,706,000) % (95% CI)
Type of Health Insurance				
Public HMO	4.7 (4.1; 5.2)	4.7 (3.5; 5.9)	11.7 (8.2; 15.1)	7.7 (5.9; 9.4)
Public Non-HMO	6.7 (6.1; 7.4)	6.4 (3.6; 9.3)	8.2 (6.2; 10.3)	15.8 (11.7; 19.9)
Private HMO	41.0 (39.5; 42.6)	48.5 (45.0; 52.0)	27.8 (24.0; 31.4)	13.1 (9.8; 16.5)
Private Non-HMO	31.5 (30.1; 32.9)	21.3 (18.6; 24.0)	17.6 (13.2; 22.1)	12.3 (7.6; 17.0)
Uninsured	16.0 (14.5; 17.5)	19.1 (16.3; 21.8)	34.8 (30.0; 39.5)	51.2 (45.2;57.1)

We find support for the importance of both financial and legal barriers to health insurance coverage in our analysis of 2009 CHIS data. Adjusting for age and gender, we estimate that 36.4% of the nearly 1.1 million uninsured undocumented immigrants report cost as the primary reason for not having health insurance coverage cost. Another 19.5% reported ineligibility due to their immigration status as the primary reason for lacking health insurance coverage, 11.2% reported ineligibility because of their working status, and nearly a third were estimated to report other reasons for lack of coverage, including not knowing how to get insurance, not having taken the steps to get insurance, and not qualifying for coverage through a public program (Exhibit 7).

Exhibit 7. Reason for Uninsured Status Anytime in the Past 12 Months among Uninsured Adults, Ages 18-64 Years, by Citizenship and Immigration Status, California Health Interview Survey, 2009

	Citizenship/Immigration Status			
	Citizen (N=3,369,000) % (95% CI)	Naturalized Citizen (N=873,000) % (95% CI)	Documented Immigrant (N=935,000) % (95% CI)	Undocumented Immigrant (N=1,070,000) % (95% CI)
Can't afford/too expensive	52.3 (48.1; 56.5)	40.1 (32.1; 48.1)	43.9 (36.0; 51.7)	36.4 (28.9; 43.8)
Ineligible due to working status/ changed employer/lost job	22.5 (18.4; 26.6)	26.7 (18.6; 34.9)	16.2 (10.2; 22.2)	11.2 (6.0; 16.5)
Ineligible due to citizenship/ immigration status	--	--	1.8 (0.7; 2.9)	19.5 (14.7; 24.4)
Other	25.2 (22.0; 28.4)	33.1 (22.6; 43.7)	38.1 (30.0; 46.3)	32.9 (25.9; 39.9)

Additional California data suggests that undocumented immigrants with insurance may also be more likely to lose their health insurance coverage over time compared to US-born citizens. In an analysis of the Los Angeles Family and Neighborhood Survey (LA FANS), Prentice et al. (2005) found that 69% of undocumented immigrants in the sample were uninsured at the beginning of a two-year event history period compared with 37% of LPRs, 22% of

naturalized and 17% of US-born. Of these uninsured, 85% of the undocumented remained uninsured for the duration of the two years compared with 75% of LPRs and 65% of US-born. The authors suggest that the high *rate* of uninsurance combined with the relatively long *duration* of uninsurance places the undocumented at a particular disadvantage in access to health care.

Other studies of the California Health Interview Survey have contributed to our understanding of health insurance coverage for children of undocumented immigrants, including US-born children in mixed status families. In an analysis of 2007 CHIS data, Ponce and authors (2011) analyze uninsurance rates for children with undocumented parents. They find that nearly 50% of undocumented children who also had undocumented parents were uninsured while 8.4% of citizen-children with undocumented parents were uninsured.

While it appears that children who are themselves undocumented face the greatest disadvantage in terms of health insurance coverage, rates of uninsurance are still elevated for citizen-children of undocumented parents and children with legal permanent residency status. In an analysis of 2001, 2003 and 2005 CHIS data, Stevens et al. (2010) found a significant difference in health insurance coverage for citizen-children with undocumented parents (i.e. in mixed-status families) compared with citizen-children with US citizen parents ("both citizen" families). Sixty-eight percent of undocumented children, 90% of children in mixed-status families and 96% of children in "both citizen" families were insured in 2005, which represented a significant difference across the groups.

The significant difference in insurance rates disappeared when the authors controlled for a number of other factors including family socio-economic status. Despite finding no significant difference in multivariate analysis, it would be misleading to conclude that there is no overall significant difference in health insurance coverage between mixed status and families in which all members are citizens. Rather, it may be that the difference in health insurance coverage between children in mixed-status families and children in "both citizen" families can be explained, or is mediated by, factors like household poverty and fewer employee benefits afforded to undocumented parents.

Ponce and authors use 2007 CHIS data to predict that both undocumented children and citizen-children with undocumented parents will continue to be excluded from health insurance coverage under health reform in California. They estimate that 40,000 citizen children who were uninsured during in 2007 and whose parents are undocumented will be excluded from health insurance coverage expansions under the ACA, given the misperception that children are not eligible due to parents' immigration status. This figure is in addition to the estimated 180,000 uninsured children projected to remain uninsured in the state because of undocumented status or legal permanent resident status with less than five years in the US (Ponce et al, 2011).

c. Overview of access to care

In large part because of their lower rates of health insurance coverage, undocumented immigrants have limited access to health care services compared to other immigrant groups. Using data from the 2007 Pew Hispanic Center/RWJF Hispanic Healthcare Survey, Rodríguez, Bustamante and Ang (2009) find that at a national level undocumented Latinos were less likely to have a usual source of healthcare as well as a reduced odds of reporting blood pressure being checked in the past 2 years, cholesterol checked in the past 5 years, or receipt of excellent/good care in the past year, even when controlling for demographic and socio-economic factors. Forty percent of undocumented respondents reported receiving no health or healthcare information

when they visited a doctor, compared with 28% naturalized Latinos and 20% of US-born Latinos. These results suggest poor access as well as reduced *quality* of health care.

In addition, while undocumented immigrants without health insurance might be able to access primary care services through community health clinics or other safety net providers, access to specialty care presents a particular challenge to undocumented immigrants. Even after primary clinicians make referrals, undocumented patients without insurance can experience long wait times to see specialists at public hospitals and have limited other options (Okie 2007). These barriers can prevent undocumented immigrants from receiving any follow-up care related to surgeries or chronic conditions (Heyman, Nunez and Talavera 2009).

d. Access to care in the California context

We find similar results for low access to care for undocumented immigrants in California based on our analysis of 2009 CHIS data. We estimate that 34.7% of undocumented immigrants did not have a usual source of care or used the ER for their usual source of care compared to 31.9% of documented immigrants, 15.6% of naturalized citizens, and 15.1% of U.S.-born citizens after adjusting for age and gender (Exhibit 8). Furthermore, based on our age and sex-adjusted models, only 17.9% of undocumented immigrants were estimated to visit a doctor's office, HMO or Kaiser for their usual source of care compared to 36.3% of documented immigrants, 54.4% of naturalized citizens and 65.0% of U.S.-born citizens. These predicted differences were statistically significant. Using 2007 CHIS data, Vargas Bustamante and authors (2010) also found disparities in having a usual source of care by immigration status, even when restricting the analysis to Mexican and Mexican-Americans. In their multivariate analysis, being undocumented was associated with being 35% less likely to have a usual source of care compared with documented Mexican immigrants, controlling for socio-demographics, economic factors, insurance and health need. For children in California, Stevens et al. (2010) find that 53% of undocumented children and 58% of children in mixed-status families reported a past-year dental visit compared with 77% of children in "both citizen" families, suggesting another healthcare disparity compared to citizen children with citizen parents.

Exhibit 8. Age- and Gender-Adjusted Predicted Percent of Health Care Services Access and Utilization among Adults, Ages 18-64 Years, by Citizenship and Immigration Status, California Health Interview Survey, 2009

	Citizenship/Immigration Status			
	U.S.-born Citizen (N=15,393,000) % (95% CI)	Naturalized Citizen (N=3,866,000) % (95% CI)	Documented Immigrant (N=2,435,000) % (95% CI)	Undocumented Immigrant (N=1,782,000) % (95% CI)
Usual Source of Care				
Doctor's Office, HMO, Kaiser	65.0 (63.4; 66.6)	54.4 (50.7; 58.0)	36.3 (31.7; 40.9)	17.9 (12.8; 22.9)
Community or government clinic, community hospital, other place, no one place	19.9 (18.5; 21.3)	30.0 (26.4; 33.6)	31.8 (27.2; 36.4)	47.5 (41.7; 53.2)
No usual source of care	15.1 (13.9; 16.3)	15.6 (12.9; 18.3)	31.9 (26.9; 36.9)	34.7(29.4; 39.9)

e. Overview of access barriers

Undocumented immigrants share a number of access barriers in common with documented immigrants and low-income individuals in general, including financial barriers,

language barriers, lack of transportation and difficulty taking time off of work from jobs where they may have no sick leave benefits (Heyman, Nunez and Talavera 2009). However, there are a number of barriers to health care access that are particular to undocumented immigrants. For example, while many individuals in low-wage, low-benefit occupations may not be able to take time away from their employment to seek care, undocumented immigrants often have even less power to negotiate time off in the workplace given their legal status (Heyman, Nunez and Talavera 2009; Kang et al. 2003).

In in-depth interviews with unauthorized immigrants on the US-Texas border, Heyman and authors (2009) find that fear of deportation as a result of traveling to and using healthcare services served as a significant barrier to access. In addition, many immigrants internalized messages in the broader social context that they did not deserve health care. In many cases, immigrants reported that their fears and sense of "deservingness" were compounded by experiences of being asked for proof of documentation from specific hospitals that responded to stricter document regulation under Medicaid qualifications.

f. Access barriers in the California context

We find evidence of significant barriers to healthcare access in our analysis of 2009 CHIS data. Adjusting for age and gender, we estimate that among adults who have seen a doctor in the past 2 years, 7% of undocumented immigrants had difficulty understanding the physician compared to 2.1% of U.S.-born citizens (Exhibit 9). Furthermore, among adults who delayed or never received needed medical care in the past year, we estimate that 81.9% of undocumented immigrants attributed this delay or lack of care to cost compared to 67.3% of documented immigrants, 58.1% of naturalized citizens, and 62.6% of U.S.-born citizens. In addition, among adults who either cannot pay off or who are currently paying off medical bills, we estimate that 41.8% of undocumented immigrants are unable to afford basic necessities because of these bills compared with 27.3% of citizens, though this difference is not significant (Exhibit 9).

Exhibit 9. Age- and Gender-Adjusted Predicted Percent of Barriers to Health Care Service Utilization among Adults, Ages 18-64 Years, by Citizenship and Immigration Status, California Health Interview Survey, 2009

	Citizenship/Immigration Status			
	U.S.-born Citizen % (95% CI)	Naturalized Citizen % (95% CI)	Documented Immigrant % (95% CI)	Undocumented Immigrant % (95% CI)
Delayed getting needed medical care in past 12 months	19.3 (18.2; 20.4)	12.5 (10.1; 15.0)	10.5 (7.6; 13.3)	7.1 (4.8; 9.4)
Because of cost or no insurance[1]	62.6 (59.1; 66.2)	58.1 (48.0; 68.2)	67.3 (53.7; 81.0)	81.9 (72.0; 91.8)
Had hard time understanding doctor during last visit[2]	2.1 (1.7; 2.4)	3.6 (2.5; 4.8)	10.1 (6.3; 13.8)	7.3 (4.5; 10.1)
Unable to pay for other basic necessities due to medical bills[3]	27.3 (23.3; 31.3)	36.7 (28.1; 45.3)	47.8 (37.0; 58.5)	41.8 (29.4; 54.2)

[1] Among 3,912,000 adults who delayed or did not get needed medical care in the last 12 months.
[2] Among 21,170,000 adults who have seen a doctor in the past 2 years.
[3] Among 2,814,000 adults who are uninsured or who have employer-based health insurance, Medicare, or Medi-Cal, and are paying off medical bills or could not pay medical bills.

There appears to be a direct relationship between local, state and national level policies towards undocumented immigrants and their ability to access care. Zimmerman and Fix (1998) report that policies intended to restrict certain groups of immigrants from receiving public benefits, including some legal immigrants, may have a generalized chilling effect on access to care for all immigrants, and particularly the undocumented. They suggest that under the 1996 welfare reform the adoption of strict verification requirements for some public benefit programs may have also deterred undocumented immigrants from using public services they continued to be eligible for. This may impact citizen-children in mixed status families as well. This was supported by an analysis of administrative data from the LA County Department of Public Social Services (January 1996 to January 1998) that found a 26% drop in newly approved applications for AFDC/TANF (now CalWORKs, California's welfare program for needy families) and Medicaid for citizen-children with undocumented parents. There was no change in applications during the same period for those children with citizen parents despite the fact that both groups remained eligible.

g. Overview of lower utilization of health services

As a result of many factors, including the many barriers to health care access, fewer health risk behaviors and younger age structure among undocumented immigrants, this population uses fewer health services of all types, including emergency services, when compared to US-born and legally-residing immigrant groups. There may also be significant healthcare utilization differences among undocumented immigrants. A study of undocumented Mexican migrants in New York City found that past-year emergency department (ED) utilization was associated with higher educational attainment, longer time in the United States, having some form of health insurance coverage and greater social support. These findings suggest that ED use is more likely among those undocumented immigrants with greater resources (e.g. human and social capital and health insurance), rather than among those recently arrived with fewer resources (Nandi et al. 2008).

h. Health service utilization in the California context

Based on 2009 CHIS data, we estimate that 28.4% of undocumented immigrants had no doctor visits in the past year compared to 19.1% of naturalized citizens and 15.3% of U.S.-born citizens, adjusting for age and gender (Exhibit 10). These differences were statistically significant. In addition, despite the popular conception that undocumented immigrants are overrepresented in emergency department utilization, we estimate that undocumented immigrants are significantly less likely than naturalized citizens and U.S.-born citizens to visit the emergency department (12.2% vs. 15.4% and 19.3%, respectively).

Even when restricting their analysis to Mexican and Mexican American respondents for 2007 CHIS data, Vargas Bustamante and colleagues (2010) found that undocumented Mexican immigrants in California reported significantly fewer doctors' visits on average than other Mexican-origin immigrant groups. The authors find that undocumented Mexican immigrants were no more likely than their documented counterparts to have used the emergency department in the previous year. Similar results of lower health care utilization were found by Ortega et al. (2007) for both Mexican and other Latino respondents to the 2003 CHIS; in local studies of undocumented immigrants in Orange County, California (Chavez 2011); undocumented Latinas in Ft. Worth, Texas (Marshall et al. 2005); and San Francisco, California (Fuentes-Afflick and Hessol 2009).

Exhibit 10. Age- and Gender-Adjusted Predicted Percent of Health Care Services Access and Utilization among Adults, Ages 18-64 Years, by Citizenship and Immigration Status, California Health Interview Survey, 2009

	Citizenship/Immigration Status			
	U.S.-born Citizen (N=15,393,000) % (95% CI)	Naturalized Citizen (N=3,866,000) % (95% CI)	Documented Immigrant (N=2,435,000) % (95% CI)	Undocumented Immigrant (N=1,782,000) % (95% CI)
Number of Doctor Visits Past Year				
No visits	15.3 (14.2; 16.4)	19.1 (17.0; 21.3)	23.2 (19.9; 26.5)	28.4 (24.1; 32.7)
1-4 visits	56.5 (55.2; 57.8)	57.8 (56.4; 59.2)	57.7 (56.4; 59.1)	56.4 (54.4; 58.4)
5 or more visits	28.2 (26.9; 29.5)	23.1 (20.7; 25.5)	19.1 (16.1; 22.1)	15.2 (12.4; 18.0)
Visited the Emergency Department in the Past Year	19.3 (18.1; 20.5)	15.4 (16.7; 18.2)	16.1 (12.6; 19.6)	12.2 (8.3; 16.0)

Section V. How is care received by undocumented immigrants paid for?

a. What are the costs?

Health care costs for undocumented immigrants are difficult to assess, particularly at the provider level. As an example, the US General Accounting Office (2004) attempted to look at uncompensated care costs with a survey of hospitals in 10 states with high uncompensated care costs and high numbers of undocumented immigrants. However, only 40% of these hospitals both responded and provided information sufficient to assess uncompensated care for patients with no social security numbers (a proxy for undocumented status). The report concluded that "because of the low response rate to key questions and because we were unable to assess the accuracy of the proxy, we could not determine the effect of undocumented aliens on hospitals' levels of uncompensated care," underscoring the difficulty of obtaining accurate estimates of healthcare costs generated by the undocumented population.

Similar challenges were reported by Capitman and authors (2009) in a survey of community clinics in California's San Joaquin Valley. These clinics were not able to provide systematic information about care for the undocumented, given that they do not collect citizenship status. And in a review by the Congressional Budget Office (2007) of local and state-level reports of the healthcare costs related to undocumented immigrants, the authors struggled to aggregate state and local-level costs to estimate the fiscal impacts of undocumented immigration at the federal level, given the wide range of data sources, disparate definitions of the population and variation in the types of benefits and tax codes at different state and local levels. Many such reports were outdated and used inaccurate methods, such as combining both legal and undocumented immigrants, to obtain estimates of health care costs for the undocumented population.

One difficulty in tracking the costs is that care for the undocumented is often included within a broader category of uncompensated care. Stimpson and authors (2010) analyzed US healthcare spending for adult naturalized citizens and non-citizens (including undocumented and LPRs) between 1999 and 2006 using MEPS and National Health Interview Survey (NHIS) data. The authors find that US citizens' healthcare costs are higher than costs for non-citizen immigrants, and there are small differences in the percentage of respondents with at least one

uncompensated care visit by immigration status. Specifically, when adjusting for age, about 13% of noncitizens had at least one uncompensated care visit in 2006 compared with 11% of native-born citizens and just over 10% for naturalized citizens. This study is limited in that it aggregates LPR and undocumented immigrants into the "noncitizen" category, but the issue of uncompensated care is particularly relevant for the health care and health outcomes of undocumented immigrants (Campbell, Sanoff and Rosner 2010; Hurley et al. 2009; Strayhorn 2006).

More reliable data appears to come from consumer-level data (e.g. through population surveys) or from Emergency Medicaid expenditures, where it appears that costs for undocumented immigrants are generally lower than for US citizens and other immigrant groups. Goldman et al. (2009) estimate medical costs for undocumented immigrants in LA County relative to their share of the population. Using 2000 Los Angeles Family and Neighborhood (LAFANs) household survey data, the authors imputed cost information from the Medical Expenditure Panel Survey based on respondent reports of medical care consumption. Undocumented immigrants account for 12% of the nonelderly population in LA County population but only 6% of health care costs. More specifically, the authors estimate that per capita health spending for undocumented men was $1026 in 2000 compared with $2360 for foreign-born citizens and $2626 for native-born men. For undocumented women, per capita medical spending was $1774 compared with $2323 for foreign-born citizens and $3298 for US-born women. Lower cost estimates for the undocumented may be attributed to their younger age structure, although estimates were limited to respondents 18 to 64 years of age.

Goldman and authors also examine how these specific health care costs are paid for. Only 14% of healthcare spending for undocumented male respondents to LAFANS came from public sources (e.g. Medicare, Medicaid, VA sources, state and locally-funded clinics). Half of this spending was covered by private sources (e.g. private insurance, workers compensation, and other sources of insurance). The remaining 37% was paid for out of pocket. A third of healthcare spending for undocumented women was paid for with public sources due to Emergency Medicaid costs for pre-natal care. The additional 60% was split evenly between private and out-of-pocket sources. Finally, the authors use these data to extrapolate the costs of care for the undocumented nationally and estimate that total medical spending for the undocumented would be $6.4 billion annually, only 17% of which (1.1 billion) is paid for by public funds. It should be noted that Goldman's estimate of national healthcare costs for undocumented immigrants at $1.1 billion per year conflicts with a financial analysis of the undocumented in Texas, which estimates a cost of $1.3 billion per year for that state alone (Strayhorn 2006).

Even among those using public sources of care, undocumented immigrants appear to generate fewer health care costs than other immigrants or US-born using public funds. DuBard and authors (2007) study Emergency Medicaid expenditures for undocumented immigrants in North Carolina between 2001 and 2004. Although the authors find a 28% increase in state spending on Emergency Medicaid for undocumented patients over the three year period, this increase was lower than the 35% increase in spending for general Medicaid services in North Carolina (35%) during the equivalent time period. Furthermore, Emergency Medicaid spending for undocumented immigrants accounted for less than 1% of total Medicaid spending in the state.

The reason for lower health care costs among undocumented immigrants has been attributed to the relatively lower need for healthcare for this relatively young and healthy immigrant population. However, lower costs are also attributed to poorer access to care for

undocumented immigrants who utilize far fewer health care services than other groups, including preventive and specialized health services (Goldman, Smith and Sood 2006).

Despite lower costs relative to the rest of the population, healthcare costs may be greater for undocumented immigrants than they might otherwise be as a result of delayed or insufficient preventative care. Coritsidis and authors (2004) compared medical records for undocumented and citizen patients receiving dialysis therapy at two New York City public hospitals. Undocumented patients presented much later in their disease course and did not benefit from cost-saving preventative care before their conditions advanced to a diagnosis of end-stage renal disease. Consequently, undocumented immigrants had longer average hospital stays and higher costs for initial dialysis treatment than citizen patients. In an analysis of undocumented women delivering at a California university hospital, Lu and authors (2000) found that the costs of postnatal and long-term pediatric care for newborns of undocumented women with no prenatal care were twice that of newborns born to undocumented mothers with at least one prenatal visit.

b. Private physicians and other health practitioners

There is little available data related to the costs incurred by private physicians and other health practitioners in caring for undocumented immigrants. A survey of US nephrologists (n=990) reports that 65% provided some care to undocumented immigrants. Among all respondents, 33% reported that the outpatient dialysis unit where they worked provided uncompensated care to undocumented patients with end-stage renal disease, while 39% did not; an additional 28% did not know (Hurley et al. 2009).

c. Community health centers and clinics

Undocumented immigrants rely heavily on safety-net health care providers, including community health centers and clinics (Kaiser Family Foundation 2009). However, costs attributed to undocumented immigrants at federally qualified health centers and clinics are difficult to estimate given that no information on immigration status is collected (Capitman, Traje and Pacheco 2009). In their analysis of Los Angeles-based survey data, Goldman and authors (2006) report that 14% of care for undocumented men and 30% of care for undocumented women came from public sources in 2000, although this figure combines both community clinics and coverage under Emergency Medicaid.

Although little is known about the specific costs incurred by undocumented patients at community health centers and clinics, this is an important area of attention under health reform. Community health centers will be responsible for implementing a large portion of the Affordable Care Act, given that they serve many of the uninsured who will gain health insurance coverage under the ACA. Community health centers were allocated an additional $11 billion in funding over a 5-year period when the ACA passed (Kaiser Family Foundation 2012). The money was intended to expand the number of sites and the operations of the 1200 community health centers in existence as of 2010, as well as increase the number of patients served at these centers -- projected to increase from 20 million patients in 2010 to 40 million in 2019. The increase in funding under the ACA was tempered by budget cutbacks in 2011 that led to a $600 million decrease in the usual federal health center appropriations, or a quarter of those federal funds that support existing health centers (Kaiser Family Foundation 2012). Funds earmarked for expansion in 2011 consequently were diverted to maintain existing community health center operations affected by this cut in federal health center funding.

In addition to being responsible for expanding operations to newly insured groups, community health centers will continue to provide health care to those who continue to lack access to affordable health coverage even after the ACA's full implementation—a population that includes undocumented immigrants. While the percentage of community health center patients who are uninsured is expected to drop from 38% in 2009, a substantial 22% are expected to remain uninsured in 2019 (Kaiser Family Foundation 2012). Health centers currently face challenges in connecting their uninsured patients to specialist care. One study using the 2006-2007 National Ambulatory Medical Care survey found 66% of physicians in community health centers had difficulty referring uninsured patients to specialist care, diagnostic tests not available at the center, and hospital admission (Hing, Hooker and Ashman 2011). These difficulties are likely to persist for uninsured, undocumented patients of community health centers even after full expansion under the ACA.

d. Hospitals

Emergency care and labor and delivery for undocumented immigrants in the US are generally covered under the 1986 Emergency Medical Treatment and Active Labor Act (EMTALA). It requires that hospitals provide care to patients presenting with acute health symptoms that could result in severe bodily impairment or death if left untreated, or to pregnant women in active labor, regardless of citizenship status or ability to pay (American College of Emergency Physicians 2012).

Under this provision, hospitals are left to cover costs of emergency care and other treatment given variable and sometimes ambiguous rules of what is covered under EMTALA. A 2002 Florida Hospital Association survey of 56 private and public acute-care hospitals across the state concluded that unclear federal and state rules mean that hospitals must continue to provide care to the undocumented even after patients have been stabilized, often because they continue to need rehabilitative care (Florida Hospital Association 2003). A recent federal audit of the Florida Emergency Medicaid program notes that they program includes dialysis as one of the few core services covered (Office of Inspector General 2010).

Campbell and authors (2010) describe that nephrologists have a moral and legal obligation under EMTALA to provide care for patients with end-stage renal disease, but are often uncompensated because the rules for what will be covered by Emergency Medicaid vary from state-to-state and from hospital-to-hospital. Dialysis care paid for by federal Emergency Medicaid funds is often restricted to dialysis treatment in the emergency room, rather than ongoing, outpatient treatment in many states. In 2007 only five states explicitly listed routine dialysis as covered by Emergency Medicaid (Legal Momentum 2009). This burden of uncompensated care costs for hospitals was exemplified by the well-publicized case of the dialysis unit at Grady Memorial Hospital in Atlanta, which provided 31% of its dialysis care to undocumented immigrants as a place of last resort. The clinic lost $3 million per year due to uncompensated care costs and temporarily shut down, but ultimately re-opened given the potentially higher costs of emergency room care for undocumented immigrants who would be denied on-going dialysis treatment. In addition, there have been documented problems with hospitals that treat undocumented patients in need of long-term nursing home care. Given the absence of nursing homes that provide charity care, hospitals in some instances are left to provide uncompensated long-term care (Florida Hospital Association 2003; Roberts 2012).

An additional problem has been described as a "the cycle of preventable hospitalizations" under Emergency Medicaid (Young, Flores and Berman 2004), whereby undocumented patients are taken in for qualifying emergency treatment, stabilized and discharged until they are ill enough to again qualify for treatment under Emergency Medicaid. In this cycle, acute, temporary, and costly treatment is required, but not preventative or maintenance care. This may be of increasing concern as elderly and disabled members of the undocumented population may be accounting for an increasing proportion of costs under Emergency Medicaid (DuBard and Massing 2007).

Finally, hospitals that serve a large number of uninsured patients, including undocumented patients not eligible for public insurance, have historically benefitted from the Medicaid Disproportionate Share Hospital (DSH) program (Mitchell et al. 2012; Peters 2009). The Medicaid DSH program serves as the greatest source of federal aid for uncompensated care and is used most by states with high numbers of undocumented immigrants, including California, New York, Texas and New Jersey (Peters 2009). Under the Affordable Care Act, the DSH program will be reduced, with quarterly reductions starting in 2014, for a total loss of $18.1 billion in DSH funds to states by 2020 (Kaiser Family Foundation 2011). This change is estimated to increase the amount of uncompensated care shouldered by hospitals with undocumented immigrant patients seeking trauma-related emergency care (Mitchell et al. 2012).

The Supreme Court's decision to make Medicaid expansion optional at the state level (Supreme Court of the United States 2012) has led governors in several states to proclaim that they will not expand their programs. Hospitals in states that do not to fully expand their Medicaid programs may be additionally burdened by uncompensated care for citizens and legal permanent residents that remain uninsured after ACA implementation. In addition, Emergency Medicaid coverage for undocumented residents will not apply to childless nonelderly adults in those states, which would have been an additional source of revenue for hospitals. The net reduction in revenues is will place further financial strains on safety net hospitals in states with large numbers of undocumented immigrants and weaker Medicaid programs.

e. Local and state governments

State and local governments assume a great deal of the costs for other public services to undocumented immigrants relative to the federal government. While undocumented immigrants are prohibited from participating in federally funded public programs (e.g. Social Security), states and local governments are often required to provide education, public safety, and other public services to their residents regardless of immigration status. The total amount spent on all public services, including healthcare, for undocumented immigrants accounts for a small percentage (about 5% for most states) of the total amount spent for the population at large (Congressional Budget Office 2007). Many estimates of health care costs incurred at the state and local levels are out of date, however, and do not account for federal support for emergency medical treatment (EMTALA) for undocumented immigrants in their calculations (Congressional Budget Office 2007).

Thus far, we have addressed the current health status, health care and health care costs for undocumented immigrants. We know turn our focus to discuss the potential impacts of the Affordable Care Act (ACA) on health care for the undocumented population

Section VI. National impacts of the exclusion of undocumented immigrants from the ACA

There will be a negligible increase in health insurance coverage of undocumented immigrants under age 65 between 2012 and 2016 as a result of the ACA. Combined with the drop in uninsured rates among documented Americans, U.S. residents without documents will rise from an estimated 9.8% of all uninsured in the country to 24.5% of all uninsured (assuming full implementation of the Medicaid expansion in all states).

These projections were calculated using the Gruber MicroSimulation Model (GMSIM), developed by Jonathan Gruber [Department of Economics, MIT]. The figures are based on the Current Population Survey (CPS, combined with data on health insurance premiums and costs (from MEPS-IC and America's Health Insurance Plans). Available data are then combined with inputs based on the number of options for health insurance coverage provided under health reform, anticipated changes in the cost of insurance, and assumptions about how individuals, families and employers will respond to changes in the cost of insurance under reform, despite the effort to bolster employer-provided insurance. All data from the GMSIM covers ages 0-64.

The GMSIM generates estimates about how the ACA will impact insurance coverage among the undocumented. Despite the Supreme Court's recent decision to place some restrictions on the ACA's Medicaid expansion efforts, estimates of coverage for the undocumented immigrant population should not be changed since they are not eligible for Medicaid and are largely in low-waged occupations that are not likely to see increased group coverage. GMSIM estimates for 2012 (using Current Population Survey data) suggest that at the national level, 5.1 million undocumented, or 61.5% of the undocumented population will remain uninsured in 2016, when the ACA is fully implemented. This is slightly increased from 2012, when the GMSIM estimates that 4.98 million, or 61% lack any form of health insurance coverage. These simulations suggest that the majority of the undocumented will continue to be excluded from health insurance coverage after reform.

The GMSIM provides detailed estimates of employer-sponsored coverage and the purchase of non-group insurance among the undocumented between 2012 and 2016, after the ACA is fully implemented. Specifically, while about 2 million, or nearly 25% of the undocumented are estimated to have employer-sponsored coverage in 2012, 25.5% or 2.1 million are projected to have such coverage in 2016. This suggests that the undocumented and their families will not experience any significant increase in employer-sponsored coverage under the ACA. Some employers are assumed to opt to have their employees seek out health insurance via the public exchange (that undocumented workers are barred from) or other non-group forms of health coverage in place of direct provision. The GMSIM predicts almost no increase in undocumented immigrants purchasing non-group forms of health insurance coverage – from 2.2% of the undocumented (181,000) in 2012 to 2.5% (208,000) in 2016.

In addition to the negligible impact that the ACA is anticipated to have on undocumented immigrants, there is some speculation that efforts to exclude the undocumented will end up deterring enrollment or causing bureaucratic delays for the inclusion of US-citizens or legally-residing immigrants. Specifically, some advocates argue that efforts to screen for citizenship status as a prerequisite to enrolling in the exchange created by the ACA will result in bureaucratic mistakes or delays that serves as barriers to health insurance coverage for citizens or legal permanent residents (Capps, Rosenblum and Fix 2009). This concern is partly based on observations that citizenship and immigration status verification requirements put in place for

Medicaid and other public benefits as part of the 1996 federal welfare reform law (Personal Responsibility and Work Opportunity Reconciliation Act) may have deterred eligible legal permanent residents from applying for these services for themselves and their children (Zimmerman and Fix 1998). Nevertheless, there are no uniform enrollment requirements stipulated under the ACA; instead, procedures to determine eligibility and complete enrollment will be selected by each health Exchange from a set of options, including delegating eligibility determination duties to another state agency (e.g. Medicaid or CHIP agency) or sharing responsibilities for eligibility and verification with these state agencies. In addition, health Exchanges are required to develop eligibility procedures that are "streamlined," "coordinated," and "timely," and do not cause delays in coverage for eligible individuals, although more concrete definitions of these criteria are pending (Robert Wood Johnson Foundation 2012).

There are a number of other anticipated barriers to enrollment that will disproportionately influence the coverage of lawfully-residing immigrants. For one, legal permanent residents continue to face a 5-year residency requirement before being eligible for Medicaid or the Children's Health Insurance Program (CHIP) at the federal-level, although states may continue to choose to cover children and pregnant women under state options. On the other hand, newly arrived legal permanent residents will be eligible for private insurance coverage through the exchange, although members of this group would have to pay 2% of their income for insurance premiums through the exchange if in the US for less than 5 years, which may prove to be a significant financial barrier (Clemans-Cope et al. 2012). In addition, legal permanent residents may have concerns about exposing the undocumented status of family members, have issues with their sponsors or face linguistic and transportation barriers to enrollment in the exchange (Clemans-Cope et al. 2012; Stephens and Artiga 2012).

Section VII. Overall health care impacts in major jurisdictions in the United States `

In addition to considering national-level impacts of health reform on the health and healthcare of undocumented immigrants, it is important to address the potential outcomes for states, given diverse policy environments as well as distinct demographic profiles. Here we review the political and demographic context and Gruber MicroSimulation Model (GMSIM) predictions for the four states with the highest concentrations of undocumented immigrants, as well as for Los Angeles, the US metropolitan region with the highest number of undocumented immigrants in the US. Finally, we consider differences for other states (Exhibit 11).

a. California

Of the estimated 11.2 million undocumented immigrants living in the US in 2010, more live in California -- about 2.6 million – than in any other state (Passel and Cohn 2011). Undocumented immigrants account for 6.8% of the state's population and 9.7% of the state's labor force (compared with 5.2% nationwide). Passel and Cohn (2011) have estimated a recent decline in California's undocumented immigrant population, down 200,000 from 2007, although this is not statistically significant. The last report to assess the fiscal impact of the undocumented population in the State of California was in 1994, a time of heightened sensitivity to the costs incurred by undocumented immigrants in the state. This concern was represented by California Proposition 187, a ballot initiative passed in 1994 aimed at restricting public services for undocumented immigrants and the first state effort at immigration enforcement; the initiative was later ruled unconstitutional. The report estimated the costs of public education, Medicaid

and incarceration using rough estimates of the undocumented population in the state. Due to limited data and conflicting methodologies, estimates for (emergency) Medicaid spending among undocumented immigrants in California for the fiscal year 1994-1995 ranged from $113 million to $395 million (US GAO 1994).

A study using the GMSIM with 2005 CPS data and 2007 California Health Interview Survey (CHIS) to project the impacts of health reform in California suggest that about 3.8 million state residents overall will gain health insurance under the ACA by 2016, with no increase in the number of covered undocumented persons (Long and Gruber 2011). The most recent GMSIM estimates using 2010 CPS data suggest that 1.17 million or 57% of the undocumented in California are expected to be uninsured in 2012 while 1.2 million, or over 58%, of the undocumented in the state are expected to remain uninsured in 2016. They will account for an estimated 41% of all uninsured in the state at that time, substantially higher than the nationwide 25% of all uninsured (Exhibit 11).

Exhibit 11. Percent of undocumented immigrants estimated to be uninsured at current and full implementation of the ACA, and percent of all uninsured who will be undocumented, among states with the highest numbers of undocumented residents.

	Percent undocumented immigrants without health insurance, current implementation (2012)	Percent undocumented immigrants without health insurance, full implementation (2016)	Percent of all uninsured who are undocumented, estimated in 2012	Percent of all uninsured who are undocumented, estimated in 2016*
Arizona	62.8	64.0	16.8	33.5
California	57.0	58.5	19.5	40.8
Florida	68.3	69.2	12.3	33.8
Georgia	72.9	72.8	10.2	28.1
Illinois	67.0	67.5	7.5	18.4
North Carolina	79.8	80.0	15.0	37.4
New Jersey	49.7	49.6	4.6	27.1
New York	50.1	52.1	11.0	16.0
Tennessee	75.5	75.6	10.8	26.3
Texas	74.0	74.3	16.1	37.8
National Ave.	61.0	61.5	9.8	24.5

Source: Gruber MicroSimulation Model (GMSIM) * Assumes full implementation of ACA Medicaid expansion.

b. Los Angeles

The most recent estimates suggest that 1 million undocumented immigrants lived in Los Angeles in 2004, accounting for 10% of the city's population (Fortuna, Capps and Passel 2007). Another 400,000 or so undocumented immigrants live in metropolitan regions that border Los

Angeles County (Orange and Riverside-San Bernardino counties). Also as of 2004, 14% of Los Angeles residents lived in families with at least one unauthorized member and 19% of children had at least one undocumented parent. This means that policies relevant to the undocumented in Los Angeles are also relevant for a large share of Los Angeles families, including citizen children. The last effort made in Los Angeles County to estimate the financial impact of undocumented immigrants on the region was in 1992, commissioned by the Los Angeles County Board of Supervisors, preceding the 1994 effort to estimate the same costs for the State of California (Los Angeles County Internal Services Department 1992). The Los Angeles report estimated that undocumented immigrants accounted for 10% of the net costs the County accrued for providing public services to its residents between 1991 and 1992, but did not address health care services directly.

Long and Gruber's (2011) projections using 2005 CPS and 2007 CHIS data show that the undocumented will account for the largest group that will remain uninsured under ACA in Los Angeles (this is also true for San Francisco and San Jose). By 2016, the undocumented will account for nearly 50% of those in Los Angeles who will remain uninsured before and after ACA compared with 41% in California overall.

c. Texas

Texas has the second largest undocumented immigrant population in the US, with an estimated 1.7 million undocumented immigrants. Undocumented immigrants are estimated to account for 6.7% of the Texas population and 9% of the labor force. Texas is one of a few states where the undocumented population has been estimated to increase since the economic recession, with an estimated addition of 200,000 undocumented residents from 2007 to 2010 (Passel and Cohn 2011). Under the Affordable Care Act (ACA), the GMSIM estimates that 74% of the undocumented population in Texas will be uninsured in 2012 (846,000), and will remain so by 2016 (863,000). Of the four states with the largest numbers of undocumented (CA, TX, FL, NY), Texas has the highest *rate* of uninsurance among undocumented immigrants both before and after ACA implementation. The undocumented will also comprise among the largest proportions of the uninsured (38%), similar to California, if Texas fully implements ACA Medicaid provisions.

A 2006 report by the Texas Office of the Comptroller concludes that undocumented immigrants in Texas generated more revenue than the state spends on them (Strayhorn 2006). This may be particularly true in Texas, where taxes are collected on consumption rather than income and spending on public services is low. The largest costs incurred, however, are by hospitals and local governments, rather than for the state overall – the report estimates hospital costs of $1.3 billion for the care of undocumented immigrants. It should be noted that this report conflicts with a study by Goldman et al (2006) that used LA-based household data to estimate national-level healthcare costs for undocumented immigrants at $1 billion. This discrepancy likely reflects the different methodologies of the two sources; whereas Goldman and authors generated cost estimates based on individual respondents to a household survey, the Texas study (Strayhorn 2006) applied estimates of the total undocumented population to aggregate costs (e.g. applied an estimate that 14% of Texas hospital patients were undocumented to the total, statewide uncompensated care costs, which is likely to overestimate costs).

Among the state-funded health services that undocumented immigrants are eligible for in Texas (Emergency Medicaid, Children with Special Health Care Needs, substance abuse, mental

health and immunization programs, school health clinics, public health and emergency medical services), this group is estimated to account for 10.6% of the total costs incurred by all consumers of these programs. The proportion of costs attributed to undocumented immigrants at the local level appears to be higher – with some hospital districts (e.g. Harris County) reporting that undocumented immigrants accounted for 14% of total operating costs and up to 25% of uncompensated care costs.

d. Florida

Florida is home to the third largest share of undocumented immigrants in the United States, with 825,000 undocumented immigrants in 2010. These undocumented immigrants account for 4.5% of the share of Florida's population and 6.6% of the labor force. Florida has experienced a significant decline in its undocumented immigrant population, from a peak of about 1.1 million in 2007 (Passel and Cohn 2011). The GMSIM estimates that 68% of the undocumented in Florida (535,000) will be uninsured in 2012 and that this will increase to 69% of the undocumented population (554,000) in 2016. Similar to other states, the undocumented will account for a much larger proportion (rising from 12% to 34%) of all uninsured if all ACA provisions are fully implemented.

e. New York

The fourth largest number of undocumented immigrants reside in New York, estimated to house 625,000 undocumented immigrants, an estimated and statistically significant decrease by 200,000 since 2007. Undocumented immigrants account for less than 4% of New York's overall population, and 4.7% of the labor force (Passel and Cohn 2011). Like Florida, Mexican migrants account for less than half of undocumented immigrants in New York; undocumented immigrants may include a more diverse group of Asian and Caribbean migrants. In addition, New York City is the metropolitan center with the second largest concentration of undocumented immigrants, estimated at just over 500,000 based on 2004 figures (Fortuna, Capps and Passel 2007). Of the four states with the highest number of undocumented immigrants, New York has the lowest rate of uninsurance as estimated by the GMSIM. This model estimates that 50% of the undocumented in New York (260,000) will lack health insurance in 2012 and 52% (266,000) will be uninsured in 2016 after ACA is fully implemented. The undocumented will account for one of the smallest fractions of the uninsured compared to other states at 16% of all uninsured.

f. Other Destinations

Undocumented immigrants, like other immigrant groups, have been increasingly dispersed in other destinations across the US. New Jersey, Illinois, Georgia and Arizona each housed at least 400,000 undocumented immigrants in 2010. In addition, the undocumented immigrant population accounted for at least 6% of the total population in Arizona, New Jersey and Nevada. Finally, undocumented immigrants comprise 6% or more of the labor force in Nevada, New Jersey, Arizona, Georgia, Maryland and the District of Columbia, in addition to traditional receiving states like California, Texas and Florida (Passel and Cohn 2010).

The GMSIM models health insurance coverage for the undocumented in all 50 states, although several of these estimates are unstable given small undocumented sample sizes for some states. For those states with large enough sample sizes (Appendix A8), including many of the so-called "new destination" states, the estimates of uninsurance among the undocumented vary widely. For example, 88% of the undocumented in New Mexico (68,000), 83% in South

Carolina (41,000) and 80% in North Carolina (247,000) are estimated to be uninsured by 2016, after the full implementation of the ACA. However, only 19% of the undocumented in Michigan (18,000), 20% in Ohio (16,000) and 24% of the undocumented in Washington (20,000) are estimated to be uninsured in 2016, some of the lowest rates across the country. The health insurance coverage rates for the undocumented by state are roughly static between 2012 and 2016. Additional research on the states with high coverage rates would be necessary to determine how and why the coverage rates of undocumented residents of those states are much higher or lower than the national average. Regardless of the uninsurance rate of undocumented residents, the fraction of the uninsured population in each state that is undocumented is estimated to roughly double between pre- and post-ACA implementation.

Section VIII. Policy options to address access to care barriers for undocumented immigrants

The previous sections summarized the published literature and California Health Interview Survey data showing that there are significant numbers undocumented immigrants who will likely comprise an increasing proportion of the uninsured after the implementation of the ACA. After adjusting for age and gender differences between populations, undocumented immigrants have average health and below average access to health care use and costs. Given the unmet needs in this population, and their likely continued residence and employment in the U.S., we next review current policies related to health insurance coverage, access to care and health services. We additionally consider the political context in which each of these policies have been developed, and their potential significance for the future health and health care of the undocumented population in the US.

a. Coverage

The primary emphasis of the ACA is to increase access to health care through increasing health insurance coverage, but it explicitly excludes undocumented immigrants from the coverage expansions. Under current federal law, the only provision that mandates coverage for undocumented immigrants is under Emergency Medicaid; as described above, this provision ensures that health care is covered to stabilize prenatal patients in active labor and other patients with acute medical emergencies, regardless of immigration status. Other sources of coverage for prenatal care for the undocumented include federal grants administered by local Community and Migrant Health Centers and the Supplemental Food Program for Women, Infants and Children (WIC).

One unknown impact of the explicit exclusion of the undocumented in ACA concerns the documentation that state exchanges will require to prove legal residence. The experience in Medicaid of requiring all persons to provide proof of legal residence suggests that significant paperwork requirements will serve more to deter permanent residents and U.S. citizens from applying than preventing undocumented residents from applying (Angus and DeVoe 2010). Similarly, the documentation about the immigration status of employees of small businesses that want to access public subsidies through the exchanges is unknown, but the higher the documentation standard the less attractive the subsidies will be. Thus, the implementation of ACA requirements have the potential to discourage some eligible individuals and businesses from seeking coverage through the exchanges.

In addition, the federal government provides states with the option to provide prenatal health coverage to undocumented women under the State Children's Health Insurance Program (SCHIP). While this program was signed into law in 1997, it was expanded in 2002 to cover "unborn" children, including the unborn citizen-children of undocumented women by providing states with the option of obtaining matching federal funds to cover prenatal care regardless of immigration status. SCHIP was extended and expanded by President Obama as the Children's Health Insurance Program Reauthorization Act (CHIPRA) of 2009. Under the Affordable Care Act, SCHIP program was extended to 2015 and federal funding available to states was expanded. Other state-federal programs that have historically allowed for prenatal care for undocumented immigrants have included the Maternal and Child Health Block Grants.

State action related to the health care of the undocumented population is highly variably, largely due to the continued exclusion of the undocumented from most federal programs. Many states used their own funding to provide prenatal health care to the undocumented even before having the option to do so under the State Children's Health Insurance Program (SCHIP) beginning in 2002. The Kaiser Family Foundation (2004) reports that as of 2004, 23 states (including California, Texas, Florida and New York) used state funding to cover prenatal care regardless of immigration status; seven states, including five of those also using state funds, had begun to use the SCHIP option to cover care for the undocumented by this time. However, Bixby (2011) reports that as of 2010, many states have still not taken the option to provide prenatal care to undocumented women and instead take the option of using SCHIP funding to expand Medicaid programs, which means that those funds continue to be subject to immigration status restrictions.

Despite provisions under the Emergency Medical Treatment and Active Labor Act (EMTALA) requiring hospitals to provide services for active labor and emergency care without regard to insurance status, and the provision of state options under SCHIP, the federal government has not provided a means of universal coverage for prenatal care for undocumented women. Some researchers criticize the lack of universal coverage of prenatal coverage at the federal level, particularly given the health and financial benefits associated with prenatal care (Bixby 2011; Kuiper et al. 1999; Lu et al. 2000). Professional organizations such as the American Congress of Obstetricians and Gynecologists and the American Nurses' Association advocate for universal prenatal coverage regardless of immigration status (American Congress of Obstetricians and Gynecologists 2009; Godfrey 2010).

In addition, health researchers and advocacy groups have argued that there are several reasons to provide greater options for health care coverage to the undocumented population in general, including the lower health care costs and health care utilization among the undocumented population, and in the interest of the well-being of US-born children of the undocumented (American Congress of Obstetricians and Gynecologists 2009; Kuiper et al. 1999; Ponce, Lavarreda and Cabezas 2011), as well as the population at large (Nandi, Loue and Galea 2009).

In the absence of federal coverage, some local-level efforts have expanded coverage for undocumented immigrants. As an example, Los Angeles County developed the Los Angeles Healthy Kids program in 2003 to cover all uninsured low and middle-income children 0-5, including undocumented children. Funding was provided by First 5 Los Angeles (funded by a statewide tobacco tax) together with several local foundations and health plans. The benefits mirror those provided by California's SCHIP program, Healthy Families. An evaluation of

Healthy Families and Healthy Kids programs that covered undocumented children in three California counties, including Los Angeles County, were found to be effective at reducing unmet healthcare needs and improving the health status of uninsured children not eligible for Medicaid or SCHIP-covered care (Howell et al. 2010).

As of 2009, LA Healthy Kids served 31,000 kids, making it the largest Children's Health Initiative in California (Howell, Dubay and Palmer 2008). However, these benefits have not stretched to cover all undocumented children. While LA Healthy Kids originally targeted children 0-18, higher than expected enrollment led the program to place an "enrollment hold" for those 6-18 years of age beginning in 2005, leaving this group still vulnerable to lack of healthcare access. In addition, there were growing concerns about continued funding for the program given political pressure to reduce services for the undocumented during the economic recession (Howell, Dubay and Palmer 2008), although enrollment is still open for 0-5 year olds in mid-2012. The focus on covering "all children," especially during a developmentally sensitive period of life, provides political appeal, although the lack of a dedicated funding source makes the long-term viability of LA Healthy Kids uncertain.

Another policy option under discussion for Mexican migrants in particular is cross-border health insurance to cover immigrants and their families who return regularly or are separated across borders (Arredondo et al. 2011; Vargas Bustamante et al. 2012). For over 15 years academics, government officials, and NGOs on both sides of the border have strategized about ways to provide low-cost coverage to Mexican immigrants in the U.S. California allows the sale of insurance policies that incentivize or require some services (typically high cost hospital care) to be obtained in Mexico. The resulting savings reduces costs and the price of insurance. There are currently several commercial plans in both California and Mexico that provide coverage to Mexican immigrants and their families, with most coverage occurring close to the U.S.-Mexico border. The Mexican government currently offers a subsidized health insurance product, *Seguro Popular Migrante*, for purchase by migrants at most Mexican consulates across the U.S. This program is limited in that migrants have to return to Mexico for all services. The Mexican Ministry of Health also has a pilot program that provides coverage for ambulatory and emergency care for guest workers in North Carolina and Washington state; comprehensive care for these workers is provided for in Mexico only (Vargas Bustamante et al. 2012).

In order for cross-border insurance to be effective and comprehensive, significant cooperation between sending and host governments is necessary. The limitations of the existing model of cross-border insurance with California and Mexico is that medical care is currently concentrated in private hospitals in Mexican cities bordering California – a significant access barrier for those undocumented immigrants living in "new destinations" and other locations dispersed throughout the US. Even for those living near the border, having to cross the border can be a barrier since those returning to the U.S. by car from Mexico can routinely be delayed by an hour or more due to congestion at immigration. In addition, Vargas-Bustamante and authors (2012) suggest that while US hospitals might generally be supportive of efforts to have costly acute and chronic care taken care of in Mexico, physicians are generally opposed to the increased regulation and liability that comes with cross-border health care utilization. On these grounds, the Texas Medical Association blocked passage of a 2001 bill that would have allowed cross-border insurance for families at the Texas-Mexico border (Vargas Bustamante et al. 2012). Cross-border health insurances is not a full solution for coverage of the undocumented since they are unable to freely cross the border to obtain lower cost and subsidized services in Mexico. Low

take up rates of existing cross border insurance also suggests that the restricted networks and the need to cross the border for some care will leave this as only a niche product.

The most successful attempts at providing coverage for undocumented immigrants has been for prenatal care and young children, but even those are limited in scope. The strong response to the LA Healthy Kids program suggests that there is a demand for very low-cost health insurance ($0-15 per child per month depending on income; $5 copayments), but funding such programs is a large barrier (L.A. Care Health Plan 2012). Programs that are funded entirely by premiums such as commercial cross-border health insurance, or subsidized by the Mexican government such as *Seguro Popular Migrante*, are not practical because they require immigrants without migration documents to cross the border for the most expensive care. Since most undocumented immigrants live in families with working adults, the most effective way to extend coverage would be to require employers to offer low-cost family health insurance to all employees. CBO estimates, as well as other independent estimates including those presented earlier, are that the net change in employer sponsored health insurance coverage under the ACA will be negligible (Congressional Budget Office 2012). Changing the incentives to employers of low-income workers to provide insurance directly rather than relying on Medicaid and subsidies to individuals in the exchanges (neither of which are available to undocumented workers) would have the greatest impact on coverage rates for the undocumented. That is not a topic of current discussion, however, nor is comprehensive immigration reform that would provide legal status and therefore access to the exchanges and Medicaid. Given the current political climate about immigration in the U.S., it appears that only small, incremental improvements in health insurance coverage are likely in the near future.

b. Access to care

In the absence of adequate insurance coverage, some policies have attempted to directly increase access to care for the undocumented. These policies have included supplemental funding to hospitals that serve large numbers of undocumented immigrants and to migrant and community health centers for primary care. As mentioned previously, at the local-level, access to primary care for undocumented immigrants is likely to be expanded through increased funding for Federally-Qualified Community Health Centers (FQHCs) under the Affordable Care Act. Under the ACA, $11 billion dollars was appropriated to FQHCs from 2011 to 2016; this increase in funds, however was somewhat offset by significant decreases for community health centers in the 2011 federal budget (Hansen and Hendrikson 2011).

Because increased health insurance coverage for the general population should decrease the uncompensated care burden on hospitals, the ACA will drastically reduce the amount of funding for Disproportionate Share Hospitals (DSH), many of which provide significant amounts of uncompensated care for undocumented immigrants. In addition, the Supreme Court's decision maked Medicaid expansion optional at the states level. As a result, states that elect not to expand Medicaid will have higher remaining uninsurance rates and a corresponding higher level of uncompensated care from US citizens and documented immigrants who would have otherwise been covered by a Medicaid expansion. This reduction in DSH funding comes amid criticism from the American Hospital Association about the lack of federal attention to the high cost of uncompensated care that many hospitals incur for providing both acute and long-term care to undocumented patients under EMTALA rules that they argue are not well defined. The American Hospital Association criticizes the Affordable Care Act for not including any provision to help hospitals cover the largely uncompensated costs of caring for the

undocumented as they continue to be excluded from public forms of health care coverage (Umbdenstock 2011). Several state hospital associations share this view; the California Hospital Association advocates that "the federal government acknowledge the cost of providing care to undocumented patients, and appropriate sufficient funds to cover the cost of their emergency and follow-up care" (California Hospital Association 2011). The Texas Hospital Association has expressed similar concerns (Texas Hospital Association 2009).

There is a precedent for federal compensation to hospitals that care for undocumented immigrants. The Medicare Modernization Act of 2003 allocated $1 billion over four years starting in 2005 to compensate hospitals, physicians, and ambulance companies for otherwise uncompensated EMTALA-level emergency care provided to undocumented immigrants. Most of those funds had been exhausted by 2012 (Centers for Medicare & Medicaid Services (CMS) 2012).

Based on a survey of several participating hospitals, the Florida Hospital Association made a more specific set of recommendations to the federal government based on their findings about hospitals grappling with the costs of both acute and long-term care for severely injured or chronically ill undocumented patients (Florida Hospital Association 2003). This organization recommends that EMTALA rules more clearly stipulate the role of hospitals in long-term care for patients who cannot be released on their own, but do not otherwise have coverage for rehabilitation in skilled nursing facilities. In addition, this report suggests that the process of repatriating undocumented patients with long-term care needs be facilitated by both US governmental agencies as well as sending countries – many of whom refuse to allow hospitals to return patients with long-term needs. In addition, if states like Florida do not fully expand their Medicaid programs as allowed under the ACA, their Emergency Medicaid programs will continue to exclude childless nonelderly adults, eliminating funding that would have otherwise been available to cover much of the EMTALA required care for low-income undocumented immigrants.

In addition to the effects of the ACA on access to care, the economic recession has already led some state and local governments to restrict health care access to the undocumented as a means of cutting costs. In California in 2009, Sacramento County decided to close primary and mental health clinics that serve a large number of undocumented patients while Contra Costa County began screening for legal status at its public clinics and hospitals (Wood 2009). Sacramento County expected to save $2.4 million while Contra Costa County projected they would save $6 million by restricting these services, although the long-term fiscal impacts were not considered (Gorman 2009). Similarly, the Yolo County Board of Supervisors approved a proposal in May 2009 to cut funding for health care services for undocumented immigrants. Yolo County faced a budget deficit of $24 million for fiscal year 2009-2010 and estimated they would save $1 million by curtailing services for the undocumented (Gorman 2009).

Thus, while the availability of low-cost primary care services at federally-funded community health centers may expand under the ACA, the economic recession is working to reduce access to state and locally funded primary care clinic access. Further research is needed to determine if there is any net increase after the ACA in access to primary care in communities with large numbers of undocumented residents. In addition, the forthcoming reductions in hospital DSH and other subsidies may place hospitals in communities with high concentrations of undocumented immigrants at risk of closure if they are not able to compensate for the reduced funding with alternative sources of revenues. In sum, the ACA offers mixed incentives on access

to health care, with the ultimate impact likely to rest on the response of state and local governments as well as providers.

c. Other Programs and Policies that Provide Specific Services

Additional policies provide for expanded services to undocumented immigrants. For example, state-funded health services that undocumented immigrants are eligible for may include Children with Special Health Care Needs, substance abuse treatment programs, mental health and immunization programs, school health clinics, and other public health and emergency medical services (Strayhorn 2006).

Examples of health services that include undocumented immigrants are those provided for screening and treatment under the National Breast and Cervical Cancer Early Detection Program (NBCCEDP) and the Breast and Cervical Prevention and Treatment Act of 2000. The NBCCEDP is administered by the Centers for Disease Control and Prevention (CDC) and provides free or low-cost screening (e.g. mammograms and Pap tests) to all age-eligible women, without regard for documentation status, at or below 250% of the Federal Poverty Level (CDC 2009). Treatment costs for women diagnosed under NBCCEDP who otherwise do not have health insurance coverage was provided for as a state option under Medicaid in 2000. CDC reports that all states took steps to accept this option by 2004 (CDC 2011). There is concern that CDC is planning on reducing grants to state health departments for providing free and low-cost breast and cervical cancer screening since those services are required under the ACA to be covered with no copayments by all private and public health insurance. The expansion of insurance will increase access for those newly covered, but undocumented women will likely face increased barriers in obtaining affordable and timely breast and cervical cancer screening as a result of cutbacks in public programs in these areas.

In addition, low-income women who are pregnant, post-partum or breastfeeding are eligible to receive nutrition benefits under the Supplemental Nutrition Program for Women, Infants and Children (WIC). WIC provides supplemental foods and nutrition education, breastfeeding promotion and support and medical and social service referrals. The WIC program also covers supplemental nutrition for children up to age 5. In 2006, 11.7% (683,000) of the 1.8 million children participating in WIC were citizen-children of undocumented immigrants (Vericker, 2010).

Programs that offer free or low cost health care services to all those in need are projected to experience declining demand as the ACA is implemented. But there will be at least 20 million persons remaining uninsured after the full implementation of the ACA, one-quarter of whom are likely to be undocumented (according to the Gruber MicroSimulation Model presented above). That means that the highest rates of need will be in communities with large numbers of recent and undocumented immigrants, but sufficient funding for subsidized services may not be available in those communities. The increasing fraction of the uninsured who are undocumented, especially in states with high levels of new coverage for documented residents like California, may lead to additional problems for undocumented immigrants if being uninsured becomes associated with being undocumented. This could lead to heightened fears (justified or not) by undocumented immigrants that showing up at public clinics and hospitals without insurance might lead to problems the immigration services. The level of fear that deters needed health care use by the undocumented, and their citizen children, is a significant problem that merits monitoring.

d. Political context of policy options

The most straightforward way to expand coverage and access to undocumented immigrants would be to enact some type of immigration policy reform that provides a pathway to citizenship. This would allow current undocumented immigrants to regularize their status and eventually qualify for the same programs and services as most other workers, families, and individuals in the country. The failure of immigration reform under the Bush administration, and the failure of even the more politically popular "Dream Act" to regularize the status those brought to the U.S. as children, indicates that immigration reform is not a viable solution to health care access barriers in the near to medium future. The most recent decision by the White House to provide deferred action and work permits to childhood arrivals does not help their health insurance status (U.S. Citizenship and Immigration Services 2012). The deferred status does not change the applicants' legal status, meaning that they remain unauthorized for purposes of public health insurance and access to health care exchanges.

Positions favoring expanded health care coverage, access or services for undocumented immigrants are met by arguments for maintaining restrictive policies or further restricting health care coverage offered to undocumented immigrants. Organizations like the Center for Immigration Studies (CIS) and the Federation for American Immigration Reform (FAIR) take these positions; their suggestions for reform include the proposal that immigrants should be responsible for the full price of healthcare premiums and the cost of care not covered by insurance; CIS suggests that those undocumented immigrants not able to cover these costs should be returned to their countries of origin (Edwards 2010). In addition, both organizations suggest that health care providers and hospitals no longer be mandated to treat undocumented patients for acute or emergency care under EMTALA, but that immigration status should be assessed as a condition of care. Underlying the perspective of these organizations are their policy recommendations for restrictive immigration policy generally. FAIR further advocates that health insurance coverage or financial ability to cover the cost of health care should be a condition of legal migration (Ruark and Martin 2009).

In addition to the restrictive perspectives provided by organizations like CIS and FAIR, there appears to be little public support for providing health care coverage to undocumented immigrants under health reform (Sanchez et al. 2011). As a result, politicians are largely unwilling to include the undocumented in health coverage provisions, including the Affordable Care Act (Galarneau 2011). Finally, policies and policy recommendations related to health and health care for the undocumented come about at a time when generalized anti-immigrant sentiment is heightened. Particularly during the economic recession, some politicians and the general public point to undocumented immigrants as a source of further economic burden via health care costs and economic competition (Lovett 2011). At the federal level, for example, these concerns have led to proposals to end birthright citizenship for the children of undocumented immigrants, currently provided for under the 14th amendment (Preston 2011). Not granting citizenship to children born in the U.S. to undocumented, or even simply noncitizen, parents would further increase the number of undocumented and uninsured residents in the US. The overall anti-immigrant sentiment has contributed to the continued exclusion of the undocumented from federal health reform, making inclusion that explicitly includes the undocumented politically challenging.

e. Conclusions: Enhancing Access to Care for Undocumented Immigrants in the ACA Era

All of the evidence points to continued poor access, or even declining access, to health care for undocumented immigrants in the coming years. This is particularly problematic since the general health policy arena will be focusing on expanded access that results from the ACA, leading to decreased fiscal and political support for residual programs that have also benefitted undocumented immigrants in the past. There are a number of uncertainties about the fate of undocumented U.S. residents and their families, including the net effect of local clinic reductions that may counter increased federally funded community health center grants, the impact of reduced DSH payments on access to hospital services, reduced direct funding for preventive services, and the response of states and localities to the shifting mix of uninsured residents. Since at least three-quarters of those who will remain uninsured after the full implementation of the ACA will be U.S. citizens and permanent residents, it may be possible to design programs that focus on those left out of health care reform generically and design approaches that expand primary care and acute care subsidies that will also benefit the undocumented. The ACA will move us towards the goal of providing equitable access to health care for all persons who need it, but significant gaps will remain that will require creative solutions given the political and organizational constraints of the American medical care system.

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Appendix

Exhibit A1. Unadjusted estimates of the Health Status of Adults Ages 18-64 years by Citizenship and Immigration Status, California Health Interview Survey, 2009

	Citizenship/Immigration Status			
	US-Born Citizen (N=15,393,000) % (95% CI)	Naturalized Citizen (N=3,866,000) % (95% CI)	Documented Immigrant (N=2,435,000) % (95% CI)	Undocumented Immigrant (N=1,782,000) % (95% CI)
Health Status				
Poor, fair or good health	39.7 (38.2; 41.2)	50.7 (47.4; 54.1)	64.7 (60.1; 69.3)	72.3 (67.2; 77.4)
Very good or excellent health	60.3 (58.8; 61.8)	49.3 (45.9; 52.6)	35.3 (30.7; 39.9)	27.7 (22.6; 32.8)
Ever had asthma	17.4 (16.2; 18.6)	8.9 (7.0; 10.7)	6.2 (4.3; 8.1)	3.9 (2.3; 5.5)
Diabetes	5.4 (4.7; 6.1)	8.5 (6.7; 10.3)	12.1 (7.4; 16.8)	4.4 (3.0; 5.8)
Heart Disease	3.5 (3.0; 4.0)	3.2 (2.3; 4.0)	4.1 (2.5; 5.8)	3.5 (0.7; 6.3)*
High Blood Pressure	20.6 (19.5; 21.7)	23.1 (20.4; 25.9)	19.4 (15.5; 23.3)	14.1 (10.2; 18)

* Estimate is unstable. Based on a coefficient of variation ≥ 0.30.

Exhibit A2. Unadjusted estimates of Various Health Behaviors of Adults, Ages 18-64 Years, by Citizenship and Immigration Status, California Health Interview Survey, 2009

	Citizenship/Immigration Status			
	US-Born Citizen (N=15,393,000) % (95% CI)	Naturalized Citizen (N=3,866,000) % (95% CI)	Documented Immigrant (N=2,435,000) % (95% CI)	Undocumented Immigrant (N=1,782,000) % (95% CI)
Current Smoker	16.0 (14.9; 17.2)	9.8 (7.8; 11.7)	13.7 (10.2; 17.3)	14.1 (9.8; 18.3)
Binge drinker[1]	35.9 (34.3; 37.4)	19.8 (17.1; 22.6)	21.9 (18.1; 25.7)	23.4 (18.9; 28.0)
Lowest consumption of healthy food[2]	34.9 (33.3; 36.5)	30.9 (27.6; 34.2)	33.7 (29.5; 38.0)	45.2 (39.5; 50.9)
Highest consumption of unhealthy food[3]	35.6 (34.0; 37.1)	22.2 (19.3; 25.1)	28.0 (23.5; 32.5)	33.5 (28.3; 38.6)
Weight				
Underweight/Normal	44.4 (42.9; 45.9)	47.2 (43.8; 50.5)	41.3 (36.6; 45.9)	38.1 (32.4; 43.7)
Overweight	31.4 (30.0; 32.8)	35.3 (32.1; 38.5)	38.9 (33.9; 44.0)	36.1 (30.8; 41.3)
Obese	24.2 (22.9; 25.4)	17.5 (15.2; 19.9)	19.8 (16.5; 23.1)	25.8 (21.1; 30.6)

[1] Someone who has binged 2 or more times in the past year. For a man, bingeing refers to drinking 5 or more alcoholic drinks in a day and for a woman it refers to drinking 4 or more alcoholic drinks in a day.
[2] Lowest quartile of consumption of fruits and vegetables per week.
[3] Highest quartile of consumption of soda, fast food, French fries, cakes, cookies, pies, ice cream, and frozen desserts per week.

Exhibit A3. Unadjusted estimates of Health Insurance Coverage among Adults, Ages 18-64 Years, by Citizenship and Immigration Status, California Health Interview Survey, 2009

	Citizenship/Immigration Status			
	U.S.-born Citizen (N=15,079,000) % (95% CI)	Naturalized Citizen (N=3,771,000) % (95% CI)	Documented Immigrant (N=2,369,000) % (95% CI)	Undocumented Immigrant (N=1,706,000) % (95% CI)
Type of Health Insurance				
Public HMO	5.5 (4.8; 6.2)	4.2 (3.1; 5.4)	11.3 (7.9; 14.8)	8.4 (6.5; 10.2)
Public Non-HMO	7.1 (6.3; 7.9)	6.1 (3.5; 8.7)	7.7 (5.7; 9.6)	14.9 (10.8; 19.1)
Private HMO	40.0 (38.5; 41.5)	49.5 (46.1; 52.9)	28.6 (24.8; 32.4)	12.9 (9.7; 16.1)
Private Non-HMO	30.7 (29.4; 32.0)	22.4 (19.7; 25.1)	18.8 (14.0; 23.6)	12.5 (7.7; 17.2)
Uninsured	16.7 (15.3; 18.2)	17.8 (15.3; 20.3)	33.6 (28.8; 38.4)	51.3 (45.6; 57.0)

Exhibit A4. Reason for Uninsured Status Anytime in the Past 12 Months among Uninsured Adults, Ages 18-64 Years, by Citizenship and Immigration Status, California Health Interview Survey, 2009

	Citizenship/Immigration Status			
	Citizen (N=3,369,000) % (95% CI)	Naturalized Citizen (N=873,000) % (95% CI)	Documented Immigrant (N=935,000) % (95% CI)	Undocumented Immigrant (N=1,070,000) % (95% CI)
Can't afford/too expensive	49.7 (45.4; 54.1)	42.7 (35.1; 50.4)	46.0 (38.2 ; 53.9)	37.6 (30.3 ; 45.0)
Ineligible due to working status/ changed employer/lost job	21.4 (17.4; 25.5)	27.6 (19.6; 35.6)	17.8 (11.1 ; 24.5)	12.4 (6.9 ; 17.9)
Ineligible due to citizenship/ immigration status	--		1.7 (0.7 ; 2.7)	19.0 (14.0 ; 24.1)
Other	28.8 (24.8; 32.8)	29.7 (20.5; 38.9)	34.4 (26.7 ; 42.1)	30.9 (24.4 ; 37.4)

Exhibit A5. Unadjusted estimates of Health Care Services Access among Adults, Ages 18-64 Years, by Citizenship and Immigration Status, California Health Interview Survey, 2009

	Citizenship/Immigration Status			
	US-Born Citizen (N=15,393,000) % (95% CI)	Naturalized Citizen (N=3,866,000) % (95% CI)	Documented Immigrant (N=2,435,000) % (95% CI)	Undocumented Immigrant (N=1,782,000) % (95% CI)
Usual Source of Care				
Doctor's Office, HMO, Kaiser	62.9 (61.3; 64.5)	57.7 (54.3; 61.2)	38.1 (33.7; 42.6)	16.5 (12.0; 21.1)
Community/government clinic, community hospital, other place, no one place	19.8 (18.3; 21.2)	27.7 (24.3; 31.0)	30.1 (25.6; 34.6)	45.0 (39.4; 50.7)
No usual source of care	17.4 (16.0; 18.7)	14.6 (12.2; 17.1)	31.8 (26.9; 36.7)	38.4 (33.2; 43.7)

Exhibit A6. Unadjusted estimates of Barriers to Health Care Service Utilization among Adults, Ages 18-64 Years, by Citizenship and Immigration Status, California Health Interview Survey, 2009

	Citizenship/Immigration Status			
	US-Born Citizen % (95% CI)	Naturalized Citizen % (95% CI)	Documented Immigrant % (95% CI)	Undocumented Immigrant % (95% CI)
Delayed getting needed medical care in past 12 months	19.2 (18.0; 20.4)	13.5 (10.9; 16.1)	11.7 (8.5; 15.0)	8.4 (5.8; 11.0)
Because of cost or no insurance[1]	62.5 (59.1; 65.9)	56.3 (45.9; 66.8)	66.3 (51.1; 81.6)	82.4 (72.9; 91.9)
Had hard time understanding doctor during last visit[2]	2.3 (1.8; 2.8)	3.5 (2.5; 4.5)	10.1 (5.2; 15.1)	7.2 (4.6; 9.7)
Unable to pay for other basic necessities due to medical bills[3]	25.7 (22.3; 29.1)	35.0 (26.9; 43.2)	45.8 (35.1; 56.6)	37.4 (26.2; 48.7)

[1] Among 3,912,000 adults who delayed or did not get needed medical care in the last 12 months.
[2] Among 21,170,000 adults who have seen a doctor in the past 2 years.
[3] Among 2,814,000 adults who are uninsured or who have employer-based health insurance, Medicare, or Medi-Cal, and are paying off medical bills or could not pay medical bills.

Exhibit A7. Unadjusted estimates of Health Care Services Utilization among Adults, Ages 18-64 Years, by Citizenship and Immigration Status, California Health Interview Survey, 2009

	Citizenship/Immigration Status			
	US-Born Citizen (N=15,393,000) % (95% CI)	Naturalized Citizen (N=3,866,000) % (95% CI)	Documented Immigrant (N=2,435,000) % (95% CI)	Undocumented Immigrant (N=1,782,000) % (95% CI)
Number of Doctor Visits Past Year				
No visits	19.8 (18.4; 21.2)	20.3 (17.3; 23.4)	27.5 (23.2; 31.7)	34.3 (29.5; 39.2)
1-4 visits	55.0 (53.5; 56.6)	58.3 (54.9; 61.7)	54.6 (49.8; 59.4)	53.4 (47.9; 58.9)
5 or more visits	25.2 (23.9; 26.4)	21.4 (18.7; 24.2)	17.9 (14.3; 21.5)	12.3 (8.5; 16.1)
Visited the ER in the Past Year	19.7 (18.4; 21.0)	15.6 (12.9; 18.4)	16.5 (13.0; 20.0)	12.7 (8.7; 16.8)