

Immigrants And The Cost Of Medical Care

Immigrants use disproportionately less medical care than their representation in the U.S. population would indicate.

by **Dana P. Goldman, James P. Smith, and Neeraj Sood**

ABSTRACT: Foreign-born adults in Los Angeles County, California, constituted 45 percent of the county's population ages 18–64 but accounted for 33 percent of health spending in 2000. Similarly, the undocumented constituted 12 percent of the nonelderly adult population but accounted for only 6 percent of spending. Extrapolating to the nation, total spending by the undocumented is \$6.4 billion, of which only 17 percent (\$1.1 billion) is paid for by public sources. The foreign-born (especially the undocumented) use disproportionately fewer medical services and contribute less to health care costs in relation to their population share, likely because of their better relative health and lack of health insurance. [*Health Affairs* 25, no. 6 (2006): 1700–1711; 10.1377/hlthaff.25.6.1700]

SEVERAL SALIENT DIMENSIONS OF THE “medical cost crisis” have received much attention, but one neglected topic involves the role of immigrants in shaping levels and trends in the costs of providing medical care. Notable research demonstrated lower medical care use among undocumented Latinos; however, it did not estimate the comparative medical costs of all types of immigrants.¹ Similarly, other research has documented lower per capita health spending by the foreign-born but was unable to distinguish among the foreign-born by their naturalization or legal status.² The relative absence of reliable cost numbers partly reflects the strong emotion surrounding immigration throughout U.S. history. Emotional pleas by advocates on both sides of the immigration divide are given especially free rein when scientific evidence is incomplete.

Immigrants are a rapidly growing part of the population. According to the 2000 census, there were thirty-two million foreign-born people living in the United States—one in nine of the total U.S. population. Estimates indicate that the U.S. population will add 120 million people by 2050, 80 million of whom are or will be here as the direct or indirect consequence of immigration.³ An equally dramatic trend is the rapidly changing fraction of undocumented immigrants. Among immigrants in the United States for less than five years in 2002, almost half were un-

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documented. In 1970 the figure was less than 5 percent.⁴

Rival concerns have been raised about the costs of providing health care to immigrants—especially those who are here illegally. The relative unavailability of health insurance raises concerns about long-term health effects if immigrants do not obtain needed medical care. But the costs of providing health care to immigrants could be large, especially where they are heavily concentrated. Los Angeles County is the largest such community in the country.

We employed novel data on health status and use of services, place of birth, and legal status of a representative sample of residents of Los Angeles County in 2000. These data allowed us to estimate service use and costs of care for nonelderly adults by nativity and type of immigrant, including the undocumented. Because of a dearth of objective cost estimates for the foreign-born, we also extrapolated our results to the entire United States. Although our cost estimates are by no means insignificant in absolute terms, the expense of providing medical care to the foreign-born—especially the public-sector cost—is much less than their population representation. This gap is largest for the undocumented.

Study Data And Methods

■ **Data.** Research on immigrants' health is limited by severe constraints on the quality of available data. Most health surveys include the foreign-born in proportion to their population representation, which, given the heterogeneity of immigrant groups, limits the scope of research. The information on immigrants' attributes is often sparse, because general surveys are principally targeted to non-immigrant populations. Crucial information such as immigrants' legal status is frequently missing because of either a perceived sensitivity about the question or the limited numbers of undocumented immigrants expected in the survey sample.

To remedy these defects, we used data from the Los Angeles Family and Neighborhood Survey (LAFANS), a study conducted in 2000 of families in a stratified random sample of sixty-five neighborhoods in LA County, with oversampling of poor neighborhoods. Households without someone who could speak English or Spanish were not eligible for interview, but they represent only 3.5 percent of the county's total population. Among the 3,086 adults selected for interview, 2,620 (85 percent) started the interview, and 2,543 (82 percent) completed it.⁵ Because LAFANS samples are quite small for those over age sixty-four and the provision of care and health costs are so different for the elderly population, we limited our analysis to adults ages 18–64. Nationally, 86 percent of adult immigrants and 97 percent of adult undocumented immigrants in 2000 were in this age group.

There are several advantages of LAFANS for research on immigrants' health care use and costs. First, it has detailed information on immigrants' legal or visa status. Second, information is available on health status, type and amount of health care used, and health insurance.

To assess immigrant and legal status, participants were asked their country of

origin. The foreign-born were then asked if they were U.S. citizens; “yes” was coded as “immigrant citizen.” Permanent residency was determined by whether noncitizens reported having a “permanent residence card or green card.” The remaining foreign-born were asked if they had a document allowing them to stay in the United States for a limited time. Anyone answering “yes” and whose documents had not expired was classified as “non-immigrant.” The remainder are the “undocumented.” This method of determining immigrants’ status represents best practice in immigrant surveys.⁶

Exhibit 1 displays (weighted) descriptive statistics of the population represented by LAFANS. In LA County there are about 5.7 million people ages 18–64 who speak English or Spanish, of whom 2.6 million are foreign-born. Immigrants who are U.S. citizens constitute 16 percent of the population; 14 percent are permanent residents; and 12 percent are undocumented. Temporary legal immigrants account for only 4 percent, and given their diversity—students, asylum seekers, and others—our discussion of them is limited. Our LA County estimate of the fraction of the foreign-born who are naturalized citizens corresponds closely to the 2000 census, and our estimates of the legal and undocumented population are quite close to those from the California Health Insurance Study, a probability sample that includes LA County residents in 2001.⁷

■ **Use of health care.** *Outpatient use* was defined as the number of times a respondent visited a doctor, nurse, or other health professional in the past year. Respondents reported whether they had ever visited a doctor for a routine checkup or for an illness or injury. *Inpatient use* was measured as the number of visits to a hospital or mental health facility for an overnight stay or longer in the past two years.

■ **Per capita costs.** LAFANS collects self-reported information on outpatient and inpatient use but not on costs. To assign expenditures (akin to “prices”) to the reported use of services, we used an imputation procedure from the Medical Expenditure Panel Survey (MEPS).⁸

The 1999 and 2000 MEPS collected data on health services use, costs, and sources of payment. We constructed utilization measures in the MEPS data that mapped to those in LAFANS: number of hospitalizations in the prior two years (1999–2000) and number of outpatient visits in 2000. Comparisons of average per capita use between the two data sets corresponded quite closely. To identify the relationship between self-reported use and spending, we regressed total spending in the MEPS data in 2000 on these two utilization measures with indicators for age group (18–44, 45–64), sex, years of education, region, and ethnicity. We also included interactions between each of these indicators and our two utilization measures. Thus, our cost model allows prices of inpatient and outpatient care to vary by region, ethnicity, and other characteristics.

Compared with national health accounts, MEPS data understate total costs by anywhere from 6 percent to 25 percent.⁹ This is because some indirect measures of health care spending—for example, general subsidies to public hospitals and clin-

EXHIBIT 1
Characteristics Of Native- And Foreign-Born Nonelderly Adults In Los Angeles County, 2000

| | Native-born (n = 1,056) | Foreign-born | | | | |
|---------------------------------|----------------------------|--------------------|------------------------------|------------------------------------|--------------------------------|---------------------------------------|
| | | All (n = 1,342) | U.S. citizen (n = 368) | Permanent resident (n = 427) | Undocu- mented (n = 430) | Temp. legal immigrant (n = 117) |
| No. of residents (thousands) | 3,142 | 2,581 | 922 | 790 | 664 | 206 |
| Percent of county population | 55% | 45% | 16% | 14% | 12% | 4% |
| Age (years) | 39 | 38 | 43 | 39 | 31 | 33 |
| Percent male | 50% | 51% | 44% | 53% | 58% | 51% |
| Household income (\$) | 68,670 | 37,937 | 56,386 | 36,393 | 17,511 | 26,341 |
| Race/ethnicity | | | | | | |
| White | 50% | 8% | 13% | 9% | 1% | 11% |
| Hispanic | 18 | 63 | 38 | 64 | 94 | 73 |
| Black | 14 | 2 | 4 | 1 | 0 | 0 |
| Asian | 4 | 22 | 37 | 19 | 2 | 15 |
| Other | 13 | 6 | 8 | 7 | 4 | 1 |
| Education | | | | | | |
| Less than high school | 9 | 42 | 19 | 46 | 70 | 45 |
| High school | 24 | 17 | 18 | 15 | 18 | 23 |
| Some college | 39 | 21 | 31 | 21 | 7 | 22 |
| College | 28 | 19 | 32 | 18 | 5 | 10 |
| Marital status | | | | | | |
| Married | 44 | 54 | 64 | 60 | 37 | 43 |
| Separated, widowed, divorced | 19 | 14 | 20 | 10 | 13 | 8 |
| Never married | 37 | 31 | 17 | 30 | 49 | 49 |
| Employment | | | | | | |
| Employed | 75 | 72 | 76 | 71 | 71 | 64 |
| Unemployed | 9 | 11 | 9 | 11 | 12 | 10 |
| Out of labor force | 16 | 17 | 15 | 17 | 16 | 26 |
| Current insurance status | | | | | | |
| Employer-provided | 60 | 43 | 59 | 45 | 22 | 29 |
| Individual purchase | 9 | 7 | 9 | 7 | 2 | 9 |
| Public insurance | 13 | 10 | 10 | 10 | 8 | 14 |
| Uninsured | 17 | 41 | 23 | 38 | 68 | 49 |
| Health conditions | | | | | | |
| Cancer (except skin) | 3 | 1 | 1 | 1 | 2 | 0 |
| Chronic lung disease | 4 | 1 | 0 | 1 | 3 | 3 |
| Myocardial infarction | 1 | 1 | 1 | 0 | 1 | 0 |
| Heart disease | 4 | 3 | 3 | 4 | 2 | 1 |
| Depression | 8 | 2 | 3 | 2 | 3 | 1 |
| Hypertension | 20 | 14 | 13 | 19 | 11 | 10 |
| Diabetes | 5 | 6 | 8 | 6 | 5 | 2 |
| Arthritis | 13 | 8 | 10 | 9 | 6 | 5 |
| Asthma | 11 | 4 | 5 | 3 | 1 | 6 |
| Any chronic condition | 38 | 27 | 27 | 32 | 19 | 18 |

SOURCES: Los Angeles Family and Neighborhood Survey (LAFANS), 2000. Population estimates are from the 2000 census.

NOTES: The sample is representative of Los Angeles County residents ages 18–64 who could complete a survey in either English or Spanish. The county population who speak English or Spanish “well” is 5.724 million based on the 2000 census and is 96.5 percent of the total county.

ics—are not explicitly tied to individual use. Thus, we conservatively inflated all of our cost estimates by 25 percent. Spending was allocated to public, private, and out-of-pocket sources based on insurance coverage, ethnicity, and sex. The break-

down by ethnicity is especially important because one might think that the native-born have more generous insurance or are less likely to default on their medical spending than is the case for immigrants.

This method is similar to an approach wherein expenditures are assigned based on mean costs by subpopulation group, but with an important difference. We also used data on health care utilization, which varies greatly within these demographic groups, as another predictor of costs in the regression model. This method greatly improved the fit of the model, so that we can explain more than 60 percent of the variation in individual spending. Separate models were estimated for participants with no hospitalizations or outpatient visits; only outpatient visits; and some hospitalizations (with or without outpatient visits). Split-sample analysis demonstrated that this three-part classification performed better than single-equation estimation. Using the estimated regressions from the MEPS data, we then imputed costs for LAFANS respondents based on their reported rates of utilization, sex, years of education, and ethnicity.

■ **County and national costs.** To get population-level estimates of aggregate spending, we multiplied per capita estimates by the population subgroup based on sex and nativity. LA County population estimates are available through LAFANS and were crosschecked with the census data. National population estimates for natives, naturalized citizens, and nonnaturalized foreign-born residents are from the 2000 Current Population Survey (CPS). The nonnaturalized foreign-born were divided into permanent legal residents, legal temporary immigrants, and undocumented based on estimates by Jeffrey Passel, a leading national expert, and his colleagues.¹⁰ National costs across all population groups and the division into private, public, and out-of-pocket costs were normalized to correspond to MEPS totals.

Study Findings

■ **Socioeconomic status and health outcomes.** The comparison of the foreign- and native-born in Exhibit 1 documents dramatic differences. In 2000, the foreign-born were far more likely to be Hispanic, and there were vast differences across all dimensions of socioeconomic status (SES). Foreign-born household incomes were little more than half those of native-born households, and 42 percent had not graduated from high school, compared with 9 percent of the native-born.

However, comparisons of native- and foreign-born residents belie substantial heterogeneity within the immigrant population. In 2000, undocumented immigrants were 94 percent Hispanic, while half of immigrant citizens were white or Asian. Undocumented immigrants were twelve years younger, on average, than immigrant citizens and eight years younger than permanent legal residents. Only 5 percent of undocumented immigrants had a college degree, compared with 32 percent of immigrant citizens and 18 percent of permanent legal residents. Mean household income of immigrant citizens (\$56,386) was about three times that of undocumented workers (\$17,511). Although labor-force participation rates were

similar between the native- and the foreign-born, immigrants were much more likely to work in food and agriculture, personal services, or textiles—industries known to be less likely to offer health insurance to their employees.¹¹

Health insurance is an important determinant of health care costs.¹² Whether coverage is privately or publicly provided affects who bears these costs. Uninsurance rates for the foreign-born were twenty-four percentage points higher than those for natives. But differences within the foreign-born population were even greater (Exhibit 1), with rates of noninsurance as high as 68 percent for undocumented immigrants compared to 23 percent for naturalized immigrants.¹³

Access to private rather than public insurance explains much of the coverage disparity among the foreign-born. Fewer than 23 percent of undocumented immigrants had employer coverage in 2000, compared with 59 percent of immigrant citizens. The foreign-born generally have somewhat lower rates of publicly provided coverage than natives. Understanding the impact of different rates and types of coverage of the native- and foreign-born is important, but equally central are the enormous differences within the foreign-born population.

The foreign-born generally reported fewer health problems, a health advantage that is especially large among the undocumented. For example, while 38 percent of natives reported a chronic condition, only 27 percent of the foreign-born and 19 percent of the undocumented did so. In part, these lower rates are attributable to the relative youth of immigrants and possible lower rates of diagnosis stemming from lack of insurance or minimal past contact with the formal health care system. But even when one controls for age and whether a person has seen a doctor, rates of reported chronic disease were lower in the immigrant population.¹⁴ A growing body of evidence indicates that on average, immigrants are healthier than the native-born and that strong positive migration selection on health is the primary reason.¹⁵

■ **Use of services.** Use of services drives much of the cost of medical care. For all groups in our sample, there were significant usage differences by sex, which justifies the necessity of stratifying by sex (Exhibit 2). Even among the native-born, hospitalizations and doctor visits were about twice as high among women as among men. For both sexes, however, use of care was much lower among the foreign-born. Foreign-born men reported 1.4 fewer doctor visits during the past year, and the gap was even larger for immigrant women. Hospitalization rates were lower for both foreign-born men and women compared with the native-born of the same sex.

As large as these utilization differences are by nativity, they still mask diversity within the foreign-born. Only 58 percent of undocumented immigrants had visited a doctor in the past year, and only 11 percent had been hospitalized. Differences were striking among undocumented men: Only 2 percent had any hospitalizations and fully half did not see a doctor.

A remarkably large fraction of the foreign-born had almost no contact with the formal health care system. One-quarter had never had a medical checkup, and one in nine had never visited a doctor—rates twice those of the native-born. This lack

EXHIBIT 2
Self-Reported Use Of Inpatient And Ambulatory Health Care By Native- And Foreign-Born Nonelderly Adults In Los Angeles County, 2000

| All | Ever hospitalized, previous 2 years (%) | Inpatient stays, previous 2 years | Saw an MD in past year (%) | MD visits, previous year | Never had a checkup (%) | Never saw an MD (%) |
|-------------------------------|---|-----------------------------------|----------------------------|--------------------------|-------------------------|---------------------|
| Native-born | 13 | 0.22 | 80 | 4.18 | 13 | 5 |
| Foreign-born | 12 | 0.16 | 67 | 2.30 | 25 | 11 |
| U.S. citizen | 13 | 0.19 | 74 | 2.40 | 18 | 7 |
| Perm. resident | 10 | 0.13 | 68 | 2.48 | 26 | 12 |
| Undocumented | 11 | 0.15 | 58 | 2.14 | 32 | 17 |
| Temp. legal immigrant | 14 | 0.15 | 60 | 1.61 | 23 | 9 |
| Males | | | | | | |
| Native-born | 9 | 0.14 | 74 | 3.01 | 21 | 10 |
| Foreign-born | 6 | 0.09 | 54 | 1.55 | 30 | 15 |
| U.S. citizen | 9 | 0.14 | 59 | 1.64 | 19 | 8 |
| Perm. resident | 7 | 0.09 | 56 | 1.52 | 34 | 15 |
| Undocumented | 2 | 0.03 | 50 | 1.62 | 40 | 23 |
| Temp. legal immigrant | 5 | 0.04 | 43 | 1.10 | 20 | 11 |
| Females | | | | | | |
| Native-born | 18 | 0.30 | 85 | 5.27 | 5 | 1 |
| Foreign-born | 17 | 0.23 | 79 | 3.00 | 19 | 7 |
| U.S. citizen | 16 | 0.22 | 85 | 2.96 | 18 | 6 |
| Perm. resident | 13 | 0.17 | 81 | 3.52 | 17 | 7 |
| Undocumented | 23 | 0.32 | 67 | 2.69 | 21 | 7 |
| Temp. legal immigrant | 22 | 0.25 | 78 | 2.14 | 27 | 7 |
| Females (no pregnancy) | | | | | | |
| Native-born | 11 | 0.23 | 85 | 5.17 | 4 | 1 |
| Foreign-born | 8 | 0.13 | 78 | 2.77 | 20 | 7 |
| U.S. citizen | 9 | 0.12 | 83 | 2.71 | 18 | 6 |
| Perm. resident | 6 | 0.11 | 80 | 3.39 | 18 | 8 |
| Undocumented | 8 | 0.18 | 63 | 2.24 | 23 | 7 |
| Temp. legal immigrant | 8 | 0.09 | 78 | 2.15 | 27 | 8 |

SOURCE: Los Angeles Family and Neighborhood Survey (LAFANS), 2000.

NOTES: The subpopulation of females with no pregnancy refers to women who did not have a pregnancy-related hospitalization in the previous two years. Data on pregnancy-related hospitalizations are available in the online Technical Appendix, <http://content.healthaffairs.org/cgi/content/full/25/6/1700/DC1>.

of contact is noteworthy among male undocumented immigrants: 40 percent never received a medical checkup, and 23 percent had never seen a doctor (Exhibit 2). Even among women, where such contact is more common, undocumented women stood out. One of every five undocumented women had never received a checkup—four times the rate for native-born women—and 7 percent had never seen a physician (compared with 1 percent of native-born women).

Pregnancy explains most of women's higher rates of hospitalizations compared with those of men, particularly among migrant women. One in every six undocumented females reported a pregnancy-related hospitalization—double the rate among native-born women.¹⁶ Even after we adjusted for age differences (results not shown), undocumented women had higher fertility rates than either the na-

tive-born or other types of immigrants.

■ **Health spending.** Spending by foreign-born men was \$1,086 less than that of natives (Exhibit 3). Most of the difference is due to lower spending by private and public insurers for the foreign-born. A similar pattern appears among women. Foreign-born women spent \$1,201 less than native-born women, with the bulk of this difference attributable to lower private and public insurance coverage and not out-of-pocket payments, which were roughly similar for foreign- and native-born women.

Given the quite different rates of use among subgroups of the foreign-born, considerable variation in per person medical costs exists within this population. In 2000, costs were lowest for temporary legal immigrants, reflecting their younger age, overall good health, and lower use of services. In contrast, per person costs were highest for both male and female immigrant citizens. Undocumented immigrants were also characterized by relatively low per capita medical costs. Consistent with their low rates of service use documented in Exhibit 2, per capita medical spending for undocumented men and women was 39 percent and 54 percent of the spending of their native-born counterparts.

Exhibit 4 translates per capita spending into total spending for LA County, based on population numbers similar to Exhibit 1 (but computed by sex). We estimate that total medical costs for all Los Angeles residents ages 18–64 were \$13.9

EXHIBIT 3
Annual Medical Spending By Native And Foreign-Born Nonelderly Adults In Los Angeles County, 2000

| Population | Per capita spending (\$) | Source of payment | | |
|---------------------------|--------------------------|-------------------|---------|---------------|
| | | Public | Private | Out of pocket |
| Males | 2,131 | 552 | 1,110 | 469 |
| Native-born | 2,626 | 763 | 1,349 | 515 |
| Foreign-born | 1,540 | 301 | 825 | 415 |
| U.S. citizen | 2,360 | 545 | 1,350 | 465 |
| Permanent resident | 1,429 | 253 | 736 | 440 |
| Undocumented | 1,026 | 148 | 504 | 375 |
| Temporary legal immigrant | 711 | 113 | 329 | 270 |
| Females | 2,762 | 705 | 1,417 | 640 |
| Native-born | 3,298 | 886 | 1,743 | 669 |
| Foreign-born | 2,097 | 479 | 1,014 | 605 |
| U.S. citizen | 2,323 | 403 | 1,358 | 563 |
| Permanent resident | 2,133 | 594 | 903 | 636 |
| Undocumented | 1,774 | 530 | 608 | 636 |
| Temporary legal immigrant | 1,711 | 316 | 778 | 618 |

SOURCE: Los Angeles Family and Neighborhood Survey (LAFANS), 2000.

NOTES: Cost estimates are imputed for each LAFANS respondent using personal characteristics and self-reported use based on algorithms from the Medical Expenditure Panel Survey (MEPS). For more details, see the online Technical Appendix, <http://content.healthaffairs.org/cgi/content/full/25/6/1700/DC1>. Spending includes expenditures for all office-based services; outpatient facilities; outpatient providers; emergency facilities; emergency providers; inpatient facilities; inpatient physician visits; home health agencies; home-based nonagency services; outpatient pharmaceuticals; dental services; vision services; and medical supplies. Public sources include Medicare; Medicaid; Department of Veterans Affairs; CHAMPUS and CHAMPVA (military civilian coverage now known as TRICARE); Indian Health Service; military treatment facilities; state- and locally funded community clinics; and other miscellaneous public programs. Private sources include private insurance, workers compensation, and other sources such as automobile, homeowners, and liability insurance.

EXHIBIT 4
Total Annual Medical Spending For Native- And Foreign-Born Nonelderly Adults, 2000

| Los Angeles County | Total spending (\$ millions) | Source of payment (\$ millions) | | | | | |
|-----------------------|------------------------------|---------------------------------|-----------|----------------|-----------|---------------|-----------|
| | | Public | | Private | | Out of pocket | |
| | | Amount | Share (%) | Amount | Share (%) | Amount | Share (%) |
| Native-born | 9,305 | 2,590 | 28 | 4,856 | 52 | 1,860 | 20 |
| Foreign-born | 4,681 | 1,002 | 21 | 2,368 | 51 | 1,311 | 28 |
| U.S. citizen | 2,157 | 429 | 20 | 1,249 | 58 | 479 | 23 |
| Permanent resident | 1,387 | 325 | 23 | 642 | 46 | 420 | 30 |
| Undocumented | 887 | 204 | 23 | 362 | 41 | 321 | 36 |
| Temp. legal immigrant | 250 | 44 | 18 | 114 | 45 | 92 | 37 |
| Total | 13,987 | 3,592 | 26 | 7,224 | 52 | 3,171 | 23 |
| United States | | | | | | | |
| Native-born | 392,511 | 82,627 | 21 | 232,915 | 59 | 76,969 | 20 |
| Foreign-born | 36,455 | 5,861 | 16 | 20,704 | 57 | 9,890 | 27 |
| U.S. citizen | 17,233 | 2,555 | 15 | 11,045 | 64 | 3,633 | 21 |
| Permanent resident | 9,937 | 1,808 | 18 | 5,181 | 52 | 2,948 | 30 |
| Undocumented | 6,449 | 1,122 | 17 | 3,024 | 47 | 2,303 | 36 |
| Temp. legal immigrant | 2,836 | 376 | 13 | 1,454 | 51 | 1,006 | 35 |
| Total | 428,966 | 88,488 | 21 | 253,619 | 59 | 86,859 | 20 |

SOURCE: Los Angeles Family and Neighborhood Survey (LAFANS), 2000.

NOTES: Top panel shows total spending for Los Angeles County residents. Cost estimates were imputed for each LAFANS respondent using personal characteristics and self-reported use based on algorithms from the Medical Expenditure Panel Survey (MEPS). For more details, see the online Technical Appendix, <http://content.healthaffairs.org/cgi/content/full/25/6/1700/DC1>. The LAFANS data were then weighted to the Los Angeles population based on the LAFANS population weights. To construct national estimates, we allocated national spending from MEPS for each group (total, public, private, and out of pocket, as shown in the bottom row) based on population counts and relative proportions of use observed in Los Angeles County. The "Share" column represents the percentage of total spending (for each subgroup) paid for by public sources, private sources, and out of pocket. For components of spending and a breakdown of public and private sources, see Exhibit 3 Notes.

billion in 2000. Private insurers financed a little more than half of this spending; public insurers, a little more than one-quarter. The remainder was paid for out of pocket. In contrast, total costs for all foreign-born residents of LA County were \$4.7 billion. Because of their lower rates of service use, the foreign-born population constituted 45 percent of the total population but only 33 percent of all medical spending. Similarly, we estimate that total medical spending on the undocumented population of LA County was \$887 million: only 6 percent of all medical costs compared with this group's 12 percent population representation.

Our national cost estimates (lower panel of Exhibit 4) involve a number of additional assumptions in translating use and prices to the national level. We assumed that the service use by undocumented immigrants in LAFANS was similar to that of the rest of the country. If anything, use among undocumented immigrants in LAFANS is probably higher, because Los Angeles has the reputation of being an immigrant-friendly location for these services. If so, we would be overstating medical costs for the undocumented at the national level.

Total medical costs in calendar year 2000 were \$429 billion for those ages 18–

64; the health care costs of the foreign-born population were \$37 billion, or 8.5 percent of total medical costs. Because of their lower rates of service use, this cost share is much smaller than their 13.1 percent population share. For the more controversial undocumented immigrants, we estimate a national medical cost of \$6.5 billion, or 1.5 percent of total national medical costs—half as large as their 3.2 percent population share.

■ **Payment sources.** Among the native-born, 21 percent of total national medical costs in 2000 were paid through public sources, compared with 16 percent for the foreign-born (Exhibit 4). This difference is compensated by higher fractions paid for out of pocket by the foreign-born (27 percent compared to 20 percent). The undocumented also used public funds less than the native-born did, but because of their low rates of private insurance, their out-of-pocket shares were relatively high (36 percent). Even though the incomes of the foreign-born and especially the undocumented were much lower than those of the native-born in 2000, they were disproportionately low users of public funds for medical care.

■ **Care outside U.S.** It is worth considering whether our results could be affected by immigrants' use of health care outside the United States. Because our costing method is based on questions about self-reported use, and not where the services were received, our cost methods actually account for use in both the United States and other countries. Furthermore, our cost estimates are conservative in the sense that any use in other countries was “priced” based on the cost of providing services in the United States. In any event, this seems not to be an important issue for overall costs. Among respondents reporting a usual source of care, none of the native-born reported having a usual source of care outside the United States, and 1 percent of foreign-born and 2 percent of undocumented immigrants did so.

Discussion

■ **Study limitations.** In constructing national estimates, we assumed that differences in use reported by different types of immigrant groups for LA County would hold for immigrants throughout the nation. This assumption is not testable directly because LAFANS is the only data set that collects such information by legal status. However, we used ethnicity to provide an informal test.¹⁷ None of the differences in spending between Hispanics and non-Hispanics in other regions compared to the West were statistically significant. A similar analysis looking at only public spending also failed to find any significant differences. If there are regional differences in costs, they are not statistically significant, and the West is not a geographical outlier. Ultimately, to the extent that the undocumented face access to care different from that in LA County, our estimates might be less reliable. If anything, LA County is likely to be more generous toward undocumented immigrants than other locations are, on average; if so, their health care costs will be overstated.

Immigrants' medical costs are closely linked with uncompensated care. MEPS imputes these costs for public hospitals and clinics based on utilization, so our

models account for this use.¹⁸ MEPS misses indirect payments that cannot be tied to specific medical events, as well as charity care from private sources that did not generate payments. Because such spending is so disparate—ranging from Medicaid hospital subsidies to Medicare payments for direct medical education—we assumed, as other researchers have done, that the incidence of these costs is borne by everyone in proportion to their health care spending.¹⁹

Finally, our data are representative of LA County residents ages 18–64 who could complete a survey in either English or Spanish. According to the 2000 census, 96.5 percent of the county population speaks English or Spanish “well.” We cannot say anything about the 3.5 percent of the county’s population who did not meet this criterion, but this remaining population is unlikely to contain a disproportionate share of undocumented immigrants, since most are of Hispanic origin.

In terms of immigrants, LA County differs from the rest of the country principally in the relative size of its foreign-born population. While 45 percent of the nonelderly adult population of LA County is immigrant, the comparable national number is only 13 percent. The number of immigrants of different types is the most important element driving costs, and these numbers do not depend on LAFANS. However, the distribution of types of immigrants is remarkably similar in LA County and the United States as a whole. In LA County, 36 percent of nonelderly adults are citizens, 31 percent have green cards, and 26 percent are undocumented. The comparable numbers for the nation are 36 percent, 28 percent, and 25 percent, respectively. The reason for this similarity is that there are relatively few high-immigrant states, and the distribution of immigrants by type in LA County is relatively similar to that of the rest of California, Texas, and the other southwestern states.

■ **Policy implications.** Because the foreign-born are relatively healthy and have less access to health insurance, they are disproportionately low users of medical care. Consequently, their \$37 billion impact on national health care costs is half as large as their representation in the U.S. population. The foreign-born are also less likely than the native-born to use public funds, so their impact on public spending is even smaller. For the same reasons (less use and less reliance on public funding), total national medical costs of nonelderly undocumented immigrants are about \$6.5 billion, and the publicly financed component is slightly more than \$1 billion—a small fraction of total U.S. health care costs.

A useful way of thinking about the scale of publicly financed medical costs is to express them in terms of the taxes paid per household to finance medical care. The public sector spent approximately \$89 billion in 2000 to provide care to all nonelderly adults; with 105 million households in the United States, this translated into a cost per household of \$843 that year. However, only a small fraction of this spending financed care for the foreign-born. Because of their lower rates of use—and less reliance on public sources—the per household tax for the provision of public care to the foreign-born was \$56, and only \$11 for the undocumented. There

are many legitimate issues surrounding the provision of health care to the nonelderly foreign-born, but high taxpayer burden is not one of them.

Health care costs are not the major component around which a policy debate about the fiscal benefits or burden of immigrants should focus. A more comprehensive analysis would incorporate the taxes paid by immigrants, including some Social Security taxes for which they might not ever claim benefits. But it also should include other public benefits received—in particular, public school costs. Unlike health care, where immigrants' take-up rates are relatively low, the school-age children of all types of immigrants attend school. Our primary debate should be about the benefits and costs of financing the schooling of the children of immigrants, not about providing them with health care.

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NOTES

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16. These data are in Online Exhibit 1, expanded from Exhibit 2 in the text to include data on pregnancy-related hospitalizations; see Note 7.
17. For details, see the online Technical Appendix; *ibid.*
18. Hadley and Holahan, "How Much Medical Care Do the Uninsured Use?"
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