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Care For America's Elderly And Disabled People Relies On Immigrant Labor

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ABSTRACT **As the US wrestles with immigration policy and caring for an aging population, data on immigrants' role as health care and long-term care workers can inform both debates. Previous studies have examined immigrants' role as health care and direct care workers (nursing, home health, and personal care aides) but not that of immigrants hired by private households or nonmedical facilities such as senior housing to assist elderly and disabled people or unauthorized immigrants' role in providing these services. Using nationally representative data, we found that in 2017 immigrants accounted for 18.2 percent of health care workers and 23.5 percent of formal and nonformal long-term care sector workers. More than one-quarter (27.5 percent) of direct care workers and 30.3 percent of nursing home housekeeping and maintenance workers were immigrants. Although legal noncitizen immigrants accounted for 5.2 percent of the US population, they made up 9.0 percent of direct care workers. Naturalized citizens, 6.8 percent of the US population, accounted for 13.9 percent of direct care workers. In light of the current and projected shortage of health care and direct care workers, our finding that immigrants fill a disproportionate share of such jobs suggests that policies curtailing immigration will likely compromise the availability of care for elderly and disabled Americans.**

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As the US elderly population grows, health care workforce shortages (which already limit care) are expected to increase in the coming decades. The Institute of Medicine projects that 3.5 million additional health care workers will be needed by 2030.[1] Currently, immigrants fill health care workforce shortages,[2,3] providing disproportionate amounts of care overall and particularly for key shortage roles such as rural physicians.[4,5] Immigrant health care workers are, on average, more educated than US-born workers,[2] and they often work at lower professional levels in the US because of lack of certification or licensure. They work nontraditional shifts that are hard to fill (such as nights and weekends),[6] and they bring linguistic and cultural diversity to address the needs of patients of varied ethnic backgrounds.[7,8]

The size of the elderly population is expected to double by 2050,[1] raising concern that long-term care workers will be in particularly short supply. Direct care workers—nursing, psychiatric, home health, and personal care aides—are the primary providers of paid hands-on care for more than thirteen million elderly and disabled Americans.[9] These workers help elderly and disabled people live at home[1,9,10] (the preferred setting for most people) by providing assistance with daily tasks such as bathing, dressing, and eating. They also help elderly and disabled people in nursing or psychiatric facilities when liv-

ing at home is not possible and during transitions home after hospitalization.

Workers prepared to fill these roles are already in short supply, and the Health Resources and Services Administration projects a 34 percent rise in the demand for direct care workers over the next decade, equivalent to a need for 650,000 additional workers.[11] Projected shortages are compounded by high turnover and retention challenges,[1,9] which create ongoing obstacles to maintaining a sufficient labor supply for long-term care.

Previous studies have examined immigrants' participation in the direct care workforce, providing care to elderly and disabled Americans, and have highlighted the disproportionate role that immigrants play in this workforce.[3,7,12,13] A single study has examined how many immigrants provide care in private households or nonmedical residential facilities such as senior housing.[7] That study focused solely on workers employed through publicly funded consumer-directed programs and did not include workers hired directly by patients and their families, a workforce that is believed to be growing.[14] Hence, previous studies likely understate the role that immigrants play in care provision,[14] and none has specifically assessed the role of unauthorized immigrants.

Recent years have seen a steep decline in the number of unauthorized immigrants entering the country.[15] The administration of President Donald Trump has taken steps to further reduce the flow of immigrants[16] and has proposed legislation to reduce the number of legal immigrants with a focus on "skilled immigrants," which could sharply reduce the number of low-wage immigrant workers.[17] To explore the implications of reducing the availability of immigrant labor, we analyzed nationally representative data on the characteristics of US- and foreign-born health care workers overall and those employed in long-term care settings. In addition to workers employed in nursing homes and home care agencies, we assessed caregivers employed directly by households and nonmedical residential facilities, workers we define as being in the nonformal long-term care sector.

Study Data And Methods

DATA SOURCES We analyzed data from the Annual Social and Economic Supplement of the 2018 Current Population Survey (CPS). The CPS is a nationally representative survey conducted by the Census Bureau and the Bureau of Labor Statistics, which collected data on 180,084 people in March 2017. The survey queried respondents about their current (that is, in March 2017) or most recent jobs and about some characteristics of their employment and income during the previous calendar year. The CPS data include detailed information about respondents' industry and most recent primary occupation.

We considered anyone born outside of the US to be an immigrant. The CPS does not query respondents about documentation status. Hence, to identify immigrants likely to be unauthorized, we used a previously published method that accurately replicates national estimates of unauthorized immigrants when applied to the CPS data. This method has been used previously in labor economics and health care research.[18,19] In brief, we categorized all immigrants in the CPS as authorized or unauthorized using place of birth; citizenship status; time in the United States; receipt of government benefits such as Social Security benefits, Medicare, and Medicaid; whether they had an occupation requiring licensure; veteran status; employment by the federal government; Section 8 housing and rental subsidies; whether they were born in Cuba; and spouse's citizenship or imputed authorization status. People were classified as being authorized if they arrived before 1980; were citizens; received Social Security benefits, Supplemental Security Income, Medicaid, Medicare, or military insurance; were veterans or currently in the armed forces; worked in the government sector; resided in public housing or received rental subsidies or were the spouse of someone in such housing or receiving such subsidies; were born in Cuba (as practically all Cuban immigrants were granted refugee status before 2017); had an occupation that required some form of licensure; or were the spouse of a legal immigrant or citizen.[18]

MEASURES To identify which survey respondents were health care workers, we first identified participants who reported their industry as offices of physicians, dentists, chiropractors, optometrists, or other health practitioners; hospitals; nursing care facilities; outpatient care centers; home health care services; or other health care services.

However, this definition would not capture health care workers employed in other settings—that is, employed privately by households or in residential facilities without nursing. Therefore, we also identified a broad group of people whose industries were coded as individual and family services, private households, or residential care facilities without nursing (which we collectively refer to as the nonformal sector). These settings include such settings as foster homes, private residences, group homes, independent housing in continuing care retirement centers, and senior housing without nursing. We considered

Our study adds to a growing literature that highlights immigrants' support for the health care of the US born.

employees in these settings to be health care workers if they reported their occupation as health manager; miscellaneous community and social service specialist (which includes community health workers and health educators); physician; miscellaneous health care support occupation; nursing occupation; nursing, psychiatric, and home health aide; personal and home care aide; or personal care or service worker. (See the online appendix for the detailed industry and occupation codes used to classify people as health care workers.)[20]

We defined *direct care occupations* as nursing, psychiatric, and home health aides or personal and home care aides. Nursing, psychiatric, and home health aides assist with activities of daily living such as eating, dressing, bathing, and using the toilet; perform clinical tasks such as range-of-motion exercises and blood pressure readings; and, in the case of home health aides, may perform light housekeeping tasks such as preparing food or changing linens. Personal and home care aides also assist with activities of daily living, housekeeping chores, meal preparation, and medication management, but unlike health aides, they perform no clinical tasks.

Most nursing home residents require assistance with daily cleaning and housekeeping tasks, and the facilities that care for them require workers in cleaning and building service occupations. Because immigrants are often employed in such work, we also identified nursing home workers in cleaning and building service occupations, including janitors, building cleaners, building maintenance and construction workers, housekeeping cleaners, and laundry and dry cleaning workers.

We calculated the numbers and characteristics of health care workers among US-born people and immigrants, including three mutually exclusive immigrant populations: naturalized citizens, legal noncitizens, and unauthorized immigrants. We repeated these analyses for two subsets of health care workers that were not mutually exclusive: long-term care workers (employed in nursing homes, home care agencies, and the nonformal sector) and direct care workers.

STATISTICAL ANALYSES We calculated the numbers and characteristics of health care workers and direct care workers using sampling weights supplied by the Census Bureau that allow extrapolation to the nation as a whole, and SAS procedures that account for the complex survey design. To assess differences between US-born people and immigrants, we used chi-square tests for categorical variables and simple linear regression to test for differences in continuous variables that accounted for replicate weights (supplied by the Census Bureau).

LIMITATIONS Our study had a number of limitations. First, the CPS, which is a household survey, is known to generate lower employment estimates than surveys of businesses do.[19,21,22] However, this is unlikely to greatly bias estimates of the proportion of health care workers who are immigrants or comparisons between groups.

Second, direct care workers in the nonformal sector (especially those employed by households) may perform multiple caregiving and housekeeping duties and may lack an official job title. Hence, they may fail to identify themselves as employed in an occupation that we classified as a health care occupation in the CPS, which may have led to a possible undercount.

Third, the CPS is known to undercount nonformal work,[23] which would lead to an undercount of the number of nonformal direct care jobs.

Fourth, unauthorized immigrants may be reluctant to answer a government survey. However, our method of imputing authorized immigrants produces numbers similar to national estimates.[18,19]

Fifth, because the CPS asks only about primary occupation, we were unable to capture direct care workers who engaged in that role as a second job.

Finally, we report the number of employed people. Because unauthorized immigrants in our study worked, on average, 0.7 more hours per week than US-born people did, our figures may slightly understate the role of unauthorized immigrants' labor.

Study Results

HEALTH CARE WORKERS The 3,296,560 immigrant health care workers we identified accounted for 18.2 percent of all health care workers in 2017, somewhat larger than immigrants' 15.5 percent share of the US population (exhibit 1).

EXHIBIT 1

Demographic characteristics of workers in the formal and nonformal health care sector, by nativity status, 2017

	US born (n = 14,848,240)	All immigrants (n = 3,296,560)	Naturalized citizens (n = 1,974,234)	Legal noncitizen immigrants (n = 960,037)	Unauthorized immigrants (n = 362,289)
Percent of US population	84.5	15.5	6.8	5.2	3.6
Percent of US health care workers	81.8	18.2	10.9	5.3	2.0
Age (years) (%)					
Less than 18	0.3	0.1****	0.1****	0.0	0.0
18–44	56.0	48.4	43.1	56.1	57.0
45–64	38.2	45.5	48.9	40.1	41.5
65 or more	5.6	6.1	8.0	3.8	1.5
Sex (%)					
Male	22.0	24.7**	24.6	24.3	26.4
Female	78.0	75.3	75.4	75.7	73.6
Highest education completed (%)					
High school or less	21.0	25.7****	20.9****	30.6	38.7
Some college	36.2	25.8	25.0	27.4	26.8
Four-year college	23.7	26.9	29.1	23.8	23.6
Advanced degree	19.1	21.5	25.1	18.2	10.9
Race/ethnicity (%)					
Non-Hispanic white	69.9	19.1****	19.0****	23.1****	8.3****
Non-Hispanic black	16.1	21.2	21.7	18.1	25.8
Hispanic	9.5	27.5	22.8	33.4	37.6
Non-Hispanic Asian	2.0	30.9	35.4	22.8	28.3
Non-Hispanic other	2.4	1.4	1.1	2.7	0.0
Health insurance (%)					
Private	79.9	77.9**	80.3	73.1****	77.6****
Medicaid or other government	7.4	9.4	7.8	16.3	0.0
Medicare	5.0	4.0	5.4	2.4	0.0
Uninsured	7.6	8.6	6.5	7.9	22.4
Income (as percent of FPL) (%)					
Less than 100%	4.6	4.8**	3.9	5.2**	8.1****
100–124%	2.7	2.5	1.5	4.5	3.2
125–149%	2.5	4.0	2.9	5.0	7.6
150% or more	90.2	88.6	91.7	85.3	81.1
Employed in: (%)					
Long-term care	22.0	30.4****	25.7**	35.5****	43.2****
Nursing home	9.5	10.5	8.4	11.3	20.0*
Home health agency	7.9	13.1****	11.7***	15.6****	15.1**
Nonformal sector	4.6	6.8***	5.6	8.7****	8.1
Mean hours worked weekly in past year	38.5	38.9	39.0	38.2	39.2

SOURCE Authors' analysis of data from the 2018 Current Population Survey. **NOTES** Percentages were weighted to be representative of the US population. Significance refers to comparisons with the US born. FPL is federal poverty level. **$p < 0.05$ ***$p < 0.01$ ****$p < 0.001$

Compared to US-born workers, immigrant health care workers were older (51.6 percent of them were older than age forty-four, compared to 43.8 percent of US-born health care workers); more likely to have completed a four-year college degree or higher (48.4 percent versus 42.8 percent); less likely to be female (75.3 percent versus 78.0 percent); and more likely to be Hispanic, non-Hispanic Asian, or non-Hispanic black. Immigrant health care workers were less likely to have private health insurance (77.9 percent versus 79.9 percent). Compared to US-born health care workers, unauthorized immigrant workers were more likely to be Hispanic, non-Hispanic Asian, or non-Hispanic black; have incomes below 100 percent of the federal poverty level (8.1 percent versus 4.6 percent); and be uninsured (22.4 percent versus 7.6 percent).

Nearly one in three (30.4 percent) immigrant health care workers were employed in long-term care settings, compared to 22.0 percent of US-born workers. Among unauthorized immigrant health care workers, 43.2 percent were employed in such settings. Compared to US-born health care workers, immigrant workers were more likely to be employed in home health agencies (13.1 percent versus 7.9 percent) and in the non-

formal sector (6.8 percent versus 4.6 percent), with particularly high proportions of legal noncitizen immigrant health care workers reporting employment in home health agencies and the nonformal sector.

LONG-TERM CARE WORKERS IN NURSING HOMES, HOME HEALTH AGENCIES, AND THE NONFORMAL SECTOR Over one million workers, or 23.5 percent, in the formal and nonformal long-term care sector were immigrants (exhibit 2). Naturalized citizens accounted for 11.9 percent of long-term care workers, and legal noncitizen immigrants accounted for 8.0 percent. As in the rest of the health care sector, immigrants working in long-term care were older than their US-born counterparts and more likely to be Hispanic, non-Hispanic Asian, or non-Hispanic black. Most immigrant and US-born long-term care workers were privately insured (63.7 percent and 65.4 percent, respectively), although a substantial proportion were uninsured (12.5 percent of the US born, 12.8 percent of all immigrants, and 24.2 percent of unauthorized immigrants). As in the rest of the health care sector, unauthorized immigrants were more likely to be Hispanic, non-Hispanic Asian, or non-Hispanic black; have incomes below 100 percent of the federal poverty level; and be uninsured, compared to US-born workers.

DIRECT CARE WORKERS In 2017, 27.5 percent of direct care workers were immigrants (exhibit 3), including 31.1 percent of direct care workers employed in home health agencies, 24.2 percent of those employed in nursing homes, and 25.7 percent of those in the nonformal sector. Although legal noncitizen immigrants accounted for 5.2 percent of the US population (exhibit 1), they made up 9.0 percent of direct care workers, in-

EXHIBIT 2

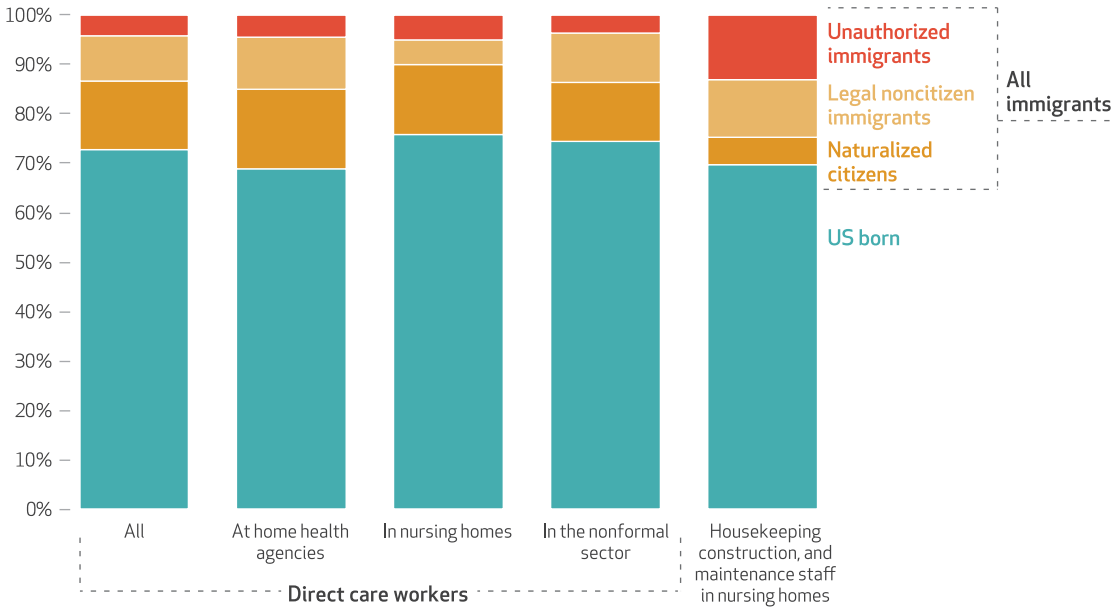
Demographic characteristics of health care workers in the formal and nonformal long-term care sector, by nativity status, 2017

	US born (n = 3,264,383)	All immigrants (n = 1,003,368)	Naturalized citizens (n = 507,216)	Legal noncitizen immigrants (n = 339,527)	Unauthorized immigrants (n = 156,625)
Percent of US population	84.5	15.5	6.8	5.2	3.6
Percent of US long-term care workers	76.5	23.5	11.9	8.0	3.7
Age (years) (%)					
Less than 18	1.0	0.2****	0.4****	0.0***	0.05**
18–44	54.7	41.7	37.2	46.5	46.7
45–64	37.8	51.4	52.1	50.3	50.8
65 or more	6.5	6.7	10.2	3.2	2.5
Sex (%)					
Male	15.8	11.2**	9.5****	13.4	12.0
Female	84.2	88.8	90.5	86.6	88.0
Highest education completed (%)					
High school or less	41.7	48.0***	45.5***	51.2	48.7
Some college	39.9	28.9	28.7	29.1	30.2
Four-year college	13.0	18.0	19.2	15.6	19.2
Advanced degree	5.4	5.0	6.6	4.1	2.0
Race/ethnicity (%)					
Non-Hispanic white	59.3	12.1****	11.8****	13.7****	9.4
Non-Hispanic black	26.5	32.6	37.4	26.0	30.6
Hispanic	10.1	32.6	25.9	39.9	38.3
Non-Hispanic Asian	1.5	21.8	24.1	18.4	21.6
Non-Hispanic other	2.7	0.9	0.9	2.0	0.0
Health insurance (%)					
Private	65.4	63.7	67.0	53.6****	75.8****
Medicaid or other government	15.4	17.6	12.9	32.5	0.0
Medicare	6.8	5.8	8.3	4.7	0.0
Uninsured	12.5	12.8	11.8	9.1	24.2
Income (as percent of FPL) (%)					
Less than 100%	11.7	9.7	9.0	9.2**	13.1
100–124%	5.7	5.5	4.4	8.3	4.5
125–149%	5.1	8.3	6.5	11.0	8.3
150% or more	77.5	76.5	80.2	71.6	74.0
Mean hours worked weekly in past year	37.0	36.9	37.4	35.8	36.9

SOURCE Authors' analysis of data from the 2018 Current Population Survey. **NOTES** Percentages were weighted to be representative of the US population. Significance refers to comparisons with the US born. FPL is federal poverty level. **$p < 0.05$ ***$p < 0.01$ ****$p < 0.001$

EXHIBIT 3

Percent of direct care workers and housekeeping, construction, and maintenance staff in nursing homes, by nativity status, 2017



SOURCE Authors' analysis of data from the 2018 Current Population Survey. **NOTE** Percentages were weighted to be representative of the US population.

cluding 10.5 percent of direct care workers in home health agencies (exhibit 3). Naturalized citizens, who accounted for 6.8 percent of the US population, made up 16.2 percent of home health agency workers and 13.9 percent of all direct care workers. More than 214,000 immigrants provided direct care in the nonformal sector (data not shown), where they accounted for 25.7 percent of the workforce. Unauthorized immigrants (3.6 percent of the US population) accounted for 4.3 percent of direct care workers.

HOUSEKEEPING, CONSTRUCTION, AND MAINTENANCE WORKERS IN NURSING HOMES In nursing homes, 30.3 percent of housekeeping, construction, and maintenance workers were immigrants (exhibit 3), over one-third of whom (13.1 percent of all of these workers) were unauthorized.

Discussion

The US health care system as a whole is dependent on the work of over three million immigrants, who account for 18.2 percent of all health care workers. More than one in four direct care workers are immigrants, including nearly one in three direct care workers in home health agencies. Immigrants also account for a disproportionate share of housekeeping and maintenance personnel in nursing homes.

Our study adds to the literature on immigrants' role in the nonformal direct care sector[7] by including workers who are privately hired to support elderly and disabled people. We found that workers in the nonformal sector provide care to hundreds of thousands of people living at home or in other nonmedical settings such as senior housing. Such care likely reduces the need for (and expense of) institutional care.

Our findings have important implications for the care of elderly and disabled people. In light of current shortages, high turnover rates, low retention rates,[1,9,24] growing demand for direct care workers,[11] and immigrants' already disproportionate role in filling such jobs, policies that curtail immigration are likely to compromise the availability of care. Moreover, the anti-immigrant rhetoric and policies that restrict immigration threaten the health and well-being of immigrants[25–27] who are entrusted with the care of the nation's elderly and disabled people.

Our study also adds to a growing literature that highlights immigrants' support for the health care of the US born. We have previously documented that immigrants pay tens of billions of dollars more annually in taxes to Medicare and in premiums to private insurers than Medicare or private insurers pay out on their behalf, effectively subsidizing the care of US-born people.[19,28,29] Immigrants also make major contributions to the health professions: One in four US

physicians has been trained in a foreign medical school,[3,30] including 38.6 percent of all US internists, 43.6 percent of cardiologists, and 50.7 percent of geriatricians.[31] Our study highlights immigrants' contribution to the everyday care of elderly and disabled people.

Addressing the direct care worker shortage will require a multifaceted approach, including better wages, benefits, and education and training programs to draw people into the labor force while reducing turnover.[10] However, curtailing immigration will almost certainly move us in the wrong direction, worsening the shortage and the availability of high-quality care for elderly and disabled Americans. ■

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