MEPS

Research Findings #28

Demographics and Health Care Access and Utilization of Limited-English-Proficient and English-Proficient Hispanics

Agency for Healthcare Research and Quality
U.S. Department of Health & Human Services

February 2008

ABSTRACT

Data from the 2004 Household Component of the Medical Expenditure Panel Survey (MEPS-HC) reveals that Hispanic adults with limited English proficiency (LEP) are a distinct population subgroup from English-proficient Hispanic adults. LEP Hispanic adults are more likely to be poor/low income, less educated, older, not employed, uninsured, without a usual source of care, and without a visit to a doctor or dentist than English-proficient Hispanic adults. English-proficient Hispanic adults are similarly disadvantaged compared to white non-Hispanic adults, and also have lower utilization.

Suggested Citation:
Brach C, Chevarley FM. Demographics and Health Care Access and Utilization of Limited-English-Proficient and English-Proficient Hispanics. Research Findings No. 28. February 2008. Agency for Healthcare Research and Quality, Rockville, MD. **http://www.meps.ahrq.gov/papers/rf28/rf28.pdf**

* * *

The estimates in this report are based on the most recent data available at the time the report was written. However, selected elements of MEPS data may be revised on the basis of additional analyses, which could result in slightly different estimates from those shown here. Please check the MEPS Web site for the most current file releases.

Center for Financing, Access, and Cost Trends
Agency for Healthcare Research and Quality
540 Gaither Road
Rockville, MD 20850
http://www.meps.ahrq.gov/

The Medical Expenditure Panel Survey (MEPS)

Household Component

The Medical Expenditure Panel Survey (MEPS) provides nationally representative estimates of health care use, expenditures, sources of payment, and health insurance coverage for the U.S. civilian non-institutionalized population. The MEPS Household Component (HC) also provides estimates of respondents' health status, demographic and socio-economic characteristics, employment, access to care, and satisfaction with health care. Estimates can be produced for individuals, families, and selected population subgroups. The panel design of the survey, which includes 5 Rounds of interviews covering 2 full calendar years, provides data for examining person level changes in selected variables such as expenditures, health insurance coverage, and health status. Using computer assisted personal interviewing (CAPI) technology, information about each household member is collected, and the survey builds on this information from interview to interview. All data for a sampled household are reported by a single household respondent.

The MEPS-HC was initiated in 1996. Each year a new panel of sample households is selected. Because the data collected are comparable to those from earlier medical expenditure surveys conducted in 1977 and 1987, it is possible to analyze long-term trends. Each annual MEPS-HC sample size is about 15,000 households. Data can be analyzed at either the person or event level. Data must be weighted to produce national estimates.

The set of households selected for each panel of the MEPS-HC is a subsample of households participating in the previous year's National Health Interview Survey (NHIS) conducted by the National Center for Health Statistics. The NHIS sampling frame provides a nationally representative sample of the U.S. civilian non-institutionalized population and reflects an oversample of blacks and Hispanics. MEPS oversamples additional policy relevant sub-groups such as Asians and low income households. The linkage of the MEPS to the previous year's NHIS provides additional data for longitudinal analytic purposes.

Medical Provider Component

Upon completion of the household CAPI interview and obtaining permission from the household survey respondents, a sample of medical providers are contacted by telephone to obtain information that household respondents can not accurately provide. This part of the MEPS is called the Medical Provider Component (MPC) and information is collected on dates of visit, diagnosis and procedure codes, charges and payments. The Pharmacy Component (PC), a subcomponent of the MPC, does not collect charges or diagnosis and procedure codes but does collect drug detail information, including National Drug Code (NDC) and medicine name, as well as date filled and sources and amounts of payment. The MPC is not designed to yield national estimates. It is primarily used as an imputation source to supplement/replace household reported expenditure information.

Survey Management

MEPS-HC and MPC data are collected under the authority of the Public Health Service Act. Data are collected under contract with Westat, Inc. Data sets and summary statistics are edited and published in accordance with the confidentiality provisions of the Public Health Service Act and the Privacy Act. The National Center for Health statistics (NCHS) provides consultation and technical assistance.

As soon as data collection and editing are completed, the MEPS survey data are released to the public in staged releases of summary reports, micro data files, and tables via the MEPS web site: www.meps.ahrq.gov . Selected data can be analyzed through MEPSnet, an on-line interactive tool designed to give data users the capability to statistically analyze MEPS data in a menu-driven environment.

Additional information on MEPS is available from the MEPS project manager or the MEPS public use data manager at the Center for Financing Access and Cost Trends, Agency for Healthcare Research and Quality, 540 Gaither Road, Rockville, MD 20850; 301-427-1406.

AHRQ Publications Clearinghouse
Attn: (publication number)
P.O. Box 8547 Silver Spring, MD 20907
800-358-9295
703-437-2078 (callers outside the United States only)
888-586-6340 (toll-free TDD service; hearing impaired only)

To order online, send an e-mail to: ahrqpubs@ahrq.gov.

Be sure to specify the AHRQ number of the document or CD-ROM you are requesting. Selected electronic files are available through the Internet on the MEPS Web site: http://www.meps.ahrq.gov/

For more information, visit the MEPS Web site or e-mail mepspd@ahrq.gov.

Table of Contents

Introduction 1

Methods 1

Findings 2

LEP Hispanic Adults vs. English-Proficient Hispanic Adults 2
Demographic characteristics: Table 1 2
Health care access: Table 2 3
Health status: Table 3 3
Utilization: Table 4 3
English-Proficient Hispanic Adults vs. White Non-Hispanic Adults 4
Demographic characteristics: Table 1 4
Health care access: Table 2 4
Health status: Table 3 4
Utilization: Table 4 4

Summary 5

Acknowledgments 5

Tables 6

Table 1: Percentage distribution of adults aged 18 years and over by demographic characteristics and English proficiency: United States, 2004 6
Table 2: Percentage distribution of adults aged 18 years and over by access to care indicators and English proficiency: United States, 2004 7
Table 3: Health status of adults aged 18 years and over by English proficiency: United States, 2004 8
Table 4: Health care utilization of adults aged 18 years and over by English proficiency: United States, 2004 9

Technical Appendix.....10

Data Source..... 10
Survey Design..... 10
Definitions 10
Standard Error Tables 13

Demographics and Health Care Access and Utilization of Limited-English-Proficient and English-Proficient Hispanics

Cindy Brach, M.P.P.* and Frances M. Chevarley, Ph.D.†, Agency for Healthcare Research and Quality

* Agency for Healthcare Research and Quality, Center for Delivery, Organization, and Markets

† Agency for Healthcare Research and Quality, Center for Financing and Cost Trends

Introduction

Language barriers have been shown in studies to impede access to health care. Limited English proficiency is associated with no physician visits in the year, reduced receipt of preventive services, lower quality health care, and lower health knowledge even after controlling for such factors as literacy, health status, health insurance, regular source of care, and economic factors.[1] Limited-English-proficient (LEP) patients also have lower satisfaction with the health care they receive.[2] This report updates and elaborates on prior work[3] by presenting a profile of LEP Hispanic adults and their health care using a large national sample and a respondent-report measure of English proficiency.

This report compares LEP Hispanic adults to the group most similar to them—English-proficient Hispanic adults. This report also compares English-proficient Hispanic adults to the white non-Hispanic population. While health care disparities between Hispanic and white non-Hispanic adults have been well documented,[4] less emphasis has been given to determine whether disparities persist when only the English-proficient Hispanic population is examined.

Methods

This report is based on data from the 2004 Household Component of the Medical Expenditure Panel Survey (MEPS-HC). The MEPS-HC, sponsored by the Agency for Healthcare Research and Quality, is an in-person interviewer-administered household survey that collects nationally representative data on the health care use, expenditures, source of payments, insurance coverage, and the quality of care for the U.S. civilian non-institutionalized population. Most of the measures used in this analysis come from the part of the survey that is administered by the interviewer. The exceptions are the measures for needing and getting needed care for an illness

---

[1] I. De Alba and J. M. Sweningson, "English Proficiency and Physicians' Recommendation of Pap Smears among Hispanics," Cancer Detect Prev 30, no. 3 (2006); 292–296. I. De Alba et al., "Impact of English Language Proficiency on Receipt of Pap Smears among Hispanics," J Gen Intern Med 19, no. 9 (2004): 967–970. K. P. Derose and D. W. Baker, "Limited English Proficiency and Latinos' Use of Physician Services," Medical Care Research & Review 57, no. 1 (2000): 76–91. N. A. Ponce, R. D. Hays, and W. E. Cunningham, "Linguistic Disparities in Health Care Access and Health Status among Older Adults," J Gen Intern Med 21, no. 7 (2006): 786–791. J. Sarver and D. W. Baker, "Effect of Language Barriers on Follow-up Appointments after an Emergency Department Visit," Journal of General Internal Medicine 15, no. 4 (2000): 256–264. J.M. Solis et al., "Acculturation, Access to Care, and Use of Preventive Services by Hispanics: Findings from Hhanes 1982–1984.," American Journal of Public Health 80, no. Supplement (1990): 11–19. D. J. Hu and R. M. M. Covell. "Health Care Usage by Hispanic Outpatients as a Function of Primary Language." Western Journal of Medicine, 144, no. 4 (1986): 490–93.

[2] O. Carrasquillo et al., "Impact of Language Barriers on Patient Satisfaction in an Emergency Department," Journal of General Internal Medicine 14, no. 2 (1999): 82–87. R. A. David and M. Rhee, "The Impact of Language as a Barrier to Effective Health Care in an Underserved Urban Hispanic Community," Mt Sinai Journal of Medicine 65, no. 5–6 (1998): 393–397. C. A. DuBard, J. Garrett, and Z. Gizlice, "Effect of Language on Heart Attack and Stroke Awareness among U.S. Hispanics," Am J Prev Med 30, no. 3 (2006): 189–196. L. S. Morales and W. E. Cunningham, "Are Latinos Less Satisfied with Communication by Health Care Providers?" Journal of General Internal Medicine 1999, no. 14 (1999): 409–417. M. M. Doty, "Hispanic Patients' Double Burden: Lack of Health Insurance and Limited English," (New York: Commonwealth Fund, 2003); C. L. Schur and L. A. Albers. "Language, Sociodemographics, and Health Care Use of Hispanic Adults." Journal of Health Care for the Poor & Underserved 7, no. 2 (1996): 140–58.

[3] Many studies use primary language of interview as a proxy for LEP status and have no more than 400 LEP adults in their sample.

[4] Agency for Health Care Policy and Research."National Healthcare Disparities Report." (Rockville, MD: U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, 2006).

or injury right away, for needing and getting specialty care, and the physical and mental health components of the Short-Form 12, Version 2 (SF-12v2™) Health Survey, which all come from the Self-Administered Questionnaire (SAQ) (a written instrument that adults in the survey complete themselves).

There are several metrics for measuring limited English proficiency.[5] For this report, Hispanic adults were defined as having limited English proficiency using the MEPS-HC if they: 1) lived in a household where a language other than English was being spoken most often, *and* 2) were reported as not being comfortable conversing in English. The term "English-proficient" refers to all other Hispanic adults.

The MEPS LEP measure was compared with the widely accepted U.S. Census question, "How well do you speak English?" asked of persons reported to speak a language other than English at home. Data used was from "The LEP Special Tabulation of Census 2000 Data on Limited English Proficient Adults" sponsored by the Department of Labor (available at http://www.doleta.gov/reports/CensusData), which defines LEP individuals as those who speak a language other than English at home and who speak English "not well," or "not at all." In MEPS about 4 percent of the total population aged 18 and over were estimated as living in households where a language other than English is spoken most often and not being comfortable conversing in English. The LEP Special Tabulations of 2000 Census data identifies a comparable proportion—4.6 percent of persons aged 18 and over—as speaking a language other than English at home and speaking English "not well" or "not at all." Although the Census Bureau produces tabulations of its English proficiency question that groups together persons who speak a language other than English at home and report speaking English less than "very well," (i.e. report speaking English "well", "not well", or "not at all") limiting the definition of LEP to those who speak "not well" or "not at all" is consistent with guidance issued by the U.S. Department of Justice on discrimination against LEP persons.[6]

Comparisons are made between LEP and English-proficient Hispanic adults, and English-proficient Hispanic and white non-Hispanic adults. All estimates were weighted to be nationally representative, and standard errors were estimated accounting for the complex sample design of the survey using SUDAAN.[7] Bivariate analyses are presented. Z tests were used to determine statistical significance. All differences discussed in the text are statistically significant at the 0.05 level or better. The Technical Appendix includes details on the data source and survey design, definitions of measures used in this report, and standard error tables.

Findings

LEP Hispanic Adults vs. English-Proficient Hispanic Adults

Demographic characteristics: Table 1

Over one-quarter of Hispanic adults (27 percent)—7,273,000 individuals—had limited English proficiency. Table 1 shows the demographic characteristics of LEP Hispanic, English-proficient Hispanic, and white non-Hispanic adults.

LEP Hispanic adults were older than English-proficient Hispanic adults, with more adults in the 65 years and over age group and fewer in the 18 to 44 years age group. There were no differences in the percentage of male and female adults between the two groups.

A higher proportion of LEP Hispanic adults were Mexican or Mexican-American than English-proficient Hispanic adults, but Mexican or Mexican-American adults constituted a majority of both population

---

[5] E. Wilson and others, "Effects of Limited English Proficiency and Physician Language on Health Care Comprehension," J Gen Intern Med 2005, 20, no. 9: 800–806.
[6] Guidance to Federal Financial Assistance Recipients Regarding Title VI Prohibition Against National Origin Discrimination Affecting Limited English Proficient Persons. June 18, 2002. Available at http://www.usdoj.gov/crt/cor/lep/DOJFinLEPFRJun182002.htm.
[7] (Research Triangle Institute; http://www.rti.org/)

subgroups. LEP Hispanic adults were more likely to be married with a spouse present, and married but not living with their spouse, than their English-proficient counterparts.

Both LEP and English-proficient Hispanic adults were numerous in the Western region of the United States. They were also concentrated in urban settings; 92 percent of LEP Hispanic adults lived in a metropolitan statistical area (MSA).

LEP Hispanic adults were more likely to be poor/low income (less than 200 percent of the federal poverty line) than English-proficient Hispanic adults (66 percent versus (vs.) 40 percent). LEP Hispanic adults received less education than their English-proficient counterparts. An estimated 44 percent of LEP Hispanic adults had not received schooling beyond grade 6, compared to 10 percent of English-proficient Hispanic adults. Some, however, were better educated; just over one-quarter of LEP Hispanic adults graduated high school (27 percent), with 9 percent of LEP Hispanic adults having attended at least some college. The majority (66 percent) of English-proficient Hispanic adults had completed high school, with 34 percent having attended at least some college. While LEP Hispanic adults were more likely to be not employed at the time of interview compared to English-proficient Hispanic adults, 70 percent did have employment.

Health care access: Table 2

Well over half (60 percent) of LEP Hispanic adults under age 65 were uninsured throughout 2004, compared to 29 percent of English-proficient Hispanic adults. LEP Hispanic adults under age 65 were also less likely to have had any private insurance. Among older adults (65+), LEP Hispanic adults were more likely to have had public insurance along with Medicare coverage (61 percent) compared to English-proficient Hispanic adults (23 percent). About half of LEP Hispanic adults (51 percent) did not have a usual source of care, compared to 37 percent of English-proficient Hispanic adults. The vast majority (89 percent) of LEP Hispanic adults with a usual source of care received language assistance (either bilingual clinicians or interpreter services) at their usual source of care.

LEP Hispanic and English-proficient Hispanic adults did not differ in reporting an illness, injury or condition that needed care right away. Among those needing care right away, LEP Hispanic adults were less likely than English-proficient Hispanic adults to report they always got care as soon as they wanted. LEP Hispanic and English-proficient Hispanic adults did not differ in reporting the need to see a specialist, and did not differ in reporting that getting to see a specialist was a big problem.

Health status: Table 3

Two measures of health status were examined; a self-assessment of general physical and mental status, and the SF-12v2™, a 12-question health status measure for which higher scores denote better functioning and well-being. LEP Hispanic adults were more likely to report worse general physical health (fair or poor) than that of English-proficient Hispanic adults. Reported general mental health status, however, was quite similar. There were no health status differences using the SF-12v2™. The physical and mental health component mean scores were close to each other and to the national average of 50.

Utilization: Table 4

Table 4 shows adult use of medical services: ambulatory visits, emergency department, inpatient, dental visits, and prescription medicines. For each of these services, LEP Hispanic adults were less likely than English-proficient Hispanic adults to use the services, with the exception of inpatient services. Slightly more than half (54 percent) of LEP Hispanic adults did not have an ambulatory visit and 84 percent did not have a dental visit, compared with 42 percent and 70 percent of English-proficient Hispanic adults.

Among those that used services, LEP Hispanic and English-proficient Hispanic adults had similar utilization. For example, LEP and English-proficient Hispanic adults who had at least one ambulatory visit in the last 12 months averaged 7 visits.

English-Proficient Hispanic Adults vs. White Non-Hispanic Adults

Demographic characteristics: Table 1

English-proficient Hispanic adults were more likely to reside in the West and in urban settings than white non-Hispanic adults. English-proficient Hispanic adults were also more likely than white non-Hispanic adults to be poor/low income (40 percent vs. 22 percent), and to be not employed (21.5 percent vs. 17.3 percent).

The educational attainment of English-proficient Hispanic adults was lower than white non-Hispanic adults. Nine times as many English-proficient Hispanic adults as white non-Hispanic adults had not received schooling beyond grade 6. A smaller proportion of English-proficient Hispanic adults had completed high school (66 percent) or attended at least some college (34 percent) than white non-Hispanic adults, 86 percent of whom completed high school, and more than half (53 percent) having attended at least some college.

Health care access: Table 2

An estimated 29 percent of English-proficient Hispanic adults under age 65 were uninsured throughout 2004, compared to 12 percent of white non-Hispanic adults. Among older adults, English-proficient Hispanic adults were more likely than white non-Hispanic adults to have had public insurance along with Medicare (23 percent vs. 7 percent). Over a third (37 percent) of English-proficient Hispanic adults did not have a usual source of care, compared to 19 percent of white non-Hispanic adults.

English-proficient Hispanic adults were less likely than white non-Hispanic adults to report an illness, injury or condition that needed care right away (25 percent vs. 30 percent). Among those needing care right away, English-proficient Hispanic adults were less likely than white non-Hispanic adults to report they always got care as soon as they wanted (48 percent vs. 63 percent). Although they were less likely to report they needed to see a specialist, English-proficient Hispanic adults were more likely to report that getting a referral to a specialist was a big problem (14 percent vs. 7 percent).

Health status: Table 3

English-proficient Hispanic adults reported similar general health and mental status as white non-Hispanic adults. Health status was also similar using the SF-12v2™. The only exception was that the physical component mean score for English-proficient Hispanic adults was slightly higher than that of white non-Hispanic adults (51.2 vs. 49.5).

Utilization: Table 4

English-proficient Hispanic adults were less likely to use any medical services than white non-Hispanic adults. As mentioned above, 42 percent of English-proficient Hispanic adults did not have an ambulatory visit and 70 percent did not have a dental visit, compared with 22 percent and 51 percent of white non-Hispanic adults. Among those with visits, white non-Hispanic adults also had higher utilization for each of these services, with the exception of emergency department visits.

Summary

Hispanic adults with limited English proficiency are a distinct population subgroup from English-proficient Hispanic adults, both demographically and in terms of access to and utilization of health care. Our findings underscore that LEP status is not the only driver of disparities between Hispanic and white non-Hispanic adults. English-proficient Hispanic adults are also disadvantaged relative to white non-Hispanic adults. In summary these are the key findings:

- *Educational disparities:* LEP Hispanic adults were more than four times as likely as English-proficient Hispanic adults to have had a sixth grade education or less and English-proficient Hispanic adults were four times as likely as white non-Hispanic adults to have less than a ninth grade education. Low literacy is associated with poorer health care and health outcomes.[8] Low educational attainment and speaking a language other than English before starting school are highly correlated with low health literacy.[9]

- *Insurance disparities:* LEP Hispanic adults aged 18 to 64 were at least twice as likely as English-proficient Hispanic adults to be uninsured, as were English-proficient Hispanic adults compared to white non-Hispanic adults. Recent research has shown that bilingual caseworkers can be extremely effective in obtaining and maintaining coverage for Latino children, an approach that perhaps could be adapted for adults.[10] Educating the Hispanic community on the value of health insurance could also affect insurance rates because Hispanic adults are less likely to take up offers of insurance.[11]

- *Disparities in usual source of care (USC) and utilization:* LEP Hispanic adults were less likely to have a USC than English-proficient Hispanic adults, who were in turn less likely than white non-Hispanic adults to have a USC. English-proficient Hispanic adults were less likely to utilize most kinds of health care than white non-Hispanic adults, and more likely than LEP Hispanic adults. English-proficient Hispanic adults also had a lower average number of visits than white non-Hispanic adults. Lack of a usual source of care and low utilization, especially in the case of doctor and dentist visits, are often a sign of poor access to health care. For LEP Hispanic adults, language barriers within the health care system may inhibit health care seeking behavior.[12] Our data show that half of LEP Hispanic adults do not have a USC, but almost 90 percent that do have a usual source of care have a provider who speaks Spanish or uses interpreters, indicating that few LEP Hispanic adults select a USC without bilingual providers or interpreters.

In conclusion, a large proportion of LEP Hispanic adults are under-educated, poor/low income and uninsured, without a regular place to get health care, and who go through the year without seeing a doctor or dentist. Contrary to the image of healthy young immigrants, LEP Hispanic adults are older than English-proficient Hispanic adults and had similar physical and mental health status as measured by the SF-12v2™. While better off than their LEP compatriots, English-proficient Hispanic adults fare well below white non-Hispanic adults on these measures, and also have fewer health care visits and report more problems getting a referral to a specialist.

Acknowledgments

The authors thank Trena Ezzati-Rice, Doris Lefkowitz, and Joel Cohen for their comments on earlier drafts of this report.

---

[8] N. D. Berkman, et al. "Literacy and Health Outcomes." In Evidence Report Technology Assessment. (Rockville, MD: Agency for Healthcare Research and Quality, 2004).
[9] M. Kutner, et al. "The Health Literacy of America's Adults: Results from the 2003 National Assessment of Adult Literacy." (Washington DC: National Center for Educational Statistics, 2006).
[10] G. Flores, "The Impact of Medical Interpreter Services on the Quality of Health Care: A Systematic Review," Med Care Res Rev 62, no. 3 (2005): 255–299.
[11] According to research conducted for Health Net by UCLA and ProfMex, two of the primary reasons Latinos are uninsured are that they don't know how to purchase it and a lack of understanding of why they need a health plan. Available at: http://www.hispanictips.com/2006/06/02/health-net-and-mexican-consulate-general-celebrate-opening-of-first-of-its-kind-community-store-opening-kicks-off-national-educational-initiative-to-educate-latinos-on-the-importance-of-health-insuran/. Accessed February 28, 2007; A. C. Monheit and J. P. Vistnes. Working Paper: Health Insurance Enrollment Decisions: Understanding the Role of Preferences for Coverage (Economic Research Initiative on the Uninsured, 2004).
[12] C.E. D'Avanzo, "Barriers to Health Care for Vietnamese Refugees," Journal of Professional Nursing 8, no. 4 (1992): 245–253.

Tables

Table 1: Percentage distribution of adults aged 18 years and over by demographic characteristics and English proficiency: United States, 2004

Characteristics	All adults	LEP Hispanic		EP Hispanic	NH white	
Estimated population (in thousands)	216,610	7,273		20,027	150,842	
(sample size)	(22,513)	(1,743)		(3,637)	(12,507)	
Age						
18–44 years	51.2	64.5	†	70.1	46.5	‡‡
45–64 years	32.6	24.4		22.9	34.7	‡‡
65 years and over	16.2	11.1	††	7.0	18.8	‡‡
Sex						
Male	48.3	50.8		51.8	48.3	‡‡
Female	51.7	49.2		48.2	51.7	‡‡
Specific Hispanic category						
Puerto Rican	1.1	2.8	*††	11.3		
Cuban/Cuban American	0.5	4.4		3.4		
Mexican/Mexican American	8.3	71.7	†	63.1		
Central or South American	1.9	15.9		15.1		
Other Hispanic	0.8	5.2		7.1		
Marital Status						
Married, Spouse in house	54.1	57.7	††	48.7	57.7	‡‡
Married, Spouse not in house	1.3	4.4	††	1.8	0.8	‡‡
Widowed	6.8	5.1		3.5	7.4	‡‡
Divorced/Separated	12.8	10.1	†	12.9	12.5	
Never Married	25.1	22.7	††	33.2	21.6	‡‡
Education when first entered survey						
grades 0–6	3.7	43.9	††	9.8	1.1	‡‡
grades 7–8	2.6	8.2	††	3.6	2.3	‡‡
grades 9–11	12.5	20.9		20.7	10.3	‡‡
High school graduate	32.4	17.7	††	31.6	33.1	
Some college	48.8	9.2	††	34.3	53.1	‡‡
Employment Status—ages 18–64						
Employed	80.5	70.2	††	78.5	82.7	‡‡
Not-employed	19.5	29.8	††	21.5	17.3	‡‡
Region						
Northeast	18.9	11.4		15.4	20.1	‡
Midwest	22.3	7.8		8.6	26.2	‡‡
South	36.0	31.8		36.8	34.0	
West	22.8	49.0	†	39.2	19.7	‡‡
Residence						
MSA	82.4	91.9		91.9	79.2	‡‡
Non-MSA	17.6	8.1		8.1	20.8	‡‡
Family income[a]						
<200% of poverty line	28.1	66.2	††	40.2	22.2	‡‡
≥ 200% of poverty line	71.9	33.8	††	59.8	77.8	‡‡

SOURCE: Center for Financing, Access, and Cost Trends, Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey Household Component (MEPS-HC) 2004 Full-Year Public Use Files.

NOTES: "All adults" includes non-Hispanic black only, non-Hispanic other single or multiple race and three cases with missing LEP status which are not shown. LEP is limited English proficient. EP is English proficient. NH is non-Hispanic.

* Indicates that figure has a relative standard error >30 percent and is considered to be statistically unreliable.

[a] Adults from families with income less than 200% of federal poverty line or 200% or more of federal poverty line. The poverty line is based on family size and composition as defined by the U.S. Census Bureau. [Ref. U.S. Census Bureau. Poverty: How the Census Bureau measures poverty. August 2, 2005. Available at: http://www.census.gov/hhes/www/poverty/povdef.html]

† Indicates significance between LEP Hispanic and EP Hispanic adults ($.01<p\leq.05$) based on a 2-sided z-test.

†† Indicates significance between LEP Hispanic and EP Hispanic adults ($p\leq.01$) based on a 2-sided z-test.

‡ Indicates significance between EP Hispanic and NH white adults ($.01<p\leq.05$) based on a 2-sided z-test.

‡‡ Indicates significance between EP Hispanic and NH white adults ($p\leq.01$) based on a 2-sided z-test.

Table 2: Percentage distribution of adults aged 18 years and over by access to care indicators and English proficiency: United States, 2004

Indicators	All adults	LEP Hispanic		EP Hispanic		NH white	
Health Insurance—ages 18–64							
Any private	74.6	24.8	††	57.9		81.8	‡‡
Public only	8.9	15.6	†	12.7		6.4	‡‡
Uninsured	16.6	59.6	††	29.4		11.8	‡‡
Health Insurance—aged 65 and over							
Medicare only	28.7	23.9		33.1		28.2	
Medicare and private	58.9	4.1	*††	41.4		64.8	‡‡
Medicare and public only	11.6	61.3	††	23.4		6.7	‡‡
Other	0.9	10.7	*†	2.1	*	0.3	*
Has usual source of medical care[a]							
Yes	77.1	48.8	††	62.7		81.4	‡‡
No	22.9	51.2	††	37.3		18.6	‡‡
Receipt of language assistance at the usual source of care for Hispanics with LEP and with a usual source of care							
Yes		89.1					
No		10.9					
Percentage of adults with an illness or injury that needed medical care right away	28.9	21.6		24.9		30.0	‡‡
Percentage distribution of how often the care was received as soon as wanted							
Never/sometimes	14.2	18.8		19.7		12.1	‡‡
Usually	26.3	46.7	††	32.6		24.7	‡‡
Always	59.5	34.5	††	47.7		63.2	‡‡
Percentage of adults who they or a doctor thought they needed to see a specialist	35.5	23.4		24.8		39.4	‡‡
Percentage distribution by extent of problem in getting a referral to a specialist							
A big problem	8.4	14.7		13.7		6.8	‡‡
A small problem	18.6	28.5		23.3		17.2	‡‡
Not a problem	72.9	56.8		63.0		76.1	‡‡

SOURCE: Center for Financing, Access, and Cost Trends, Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey Household Component (MEPS-HC) 2004 Full-Year Public Use Files.

NOTES: "All adults" includes non-Hispanic black only, non-Hispanic other single or multiple race, and three cases with missing LEP status which are not shown. LEP is limited English proficient. EP is English proficient. NH is non-Hispanic.

* Indicates that figure has a relative standard error >30 percent and is considered to be statistically unreliable. Adults 18–64 were classified as having "any private" if they were privately insured (including TRICARE/VA) at any time during the year; "public only" if they had only public insurance during the year; and "uninsured" if they were uninsured for the entire year. Adults 65 and over were classified as having Medicare, and whether or not in addition they had any private, or public only.

[a] Refers to a particular doctor's office, clinic, health center, or other place where a person usually goes if he or she is sick or needs advice about personal health matters.

† Indicates significance between LEP Hispanic and EP Hispanic adults ($.01<p\leq.05$) based on a 2-sided z-test.

†† Indicates significance between LEP Hispanic and EP Hispanic adults ($p\leq.01$) based on a 2-sided z-test.

‡ Indicates significance between EP Hispanic and NH white adults ($.01<p\leq.05$) based on a 2-sided z-test.

‡‡ Indicates significance between EP Hispanic and NH white adults ($p\leq.01$) based on a 2-sided z-test.

Table 3: Health status of adults aged 18 years and over by English proficiency: United States, 2004

Measures	All adults	LEP Hispanic	EP Hispanic	NH white
Physical Health Status (percentage)				
Excellent/very good/good	86.5	80.8 ††	87.9	87.1
fair/poor	13.5	19.2 ††	12.1	12.9
Mental Health Status (percentage)				
Excellent/very good/good	92.9	92.5	93.3	93.1
fair/poor	7.1	7.5	6.7	6.9
Physical Component Summary of SF-12 (mean score)	49.6	50.3	51.2	49.5 ‡‡
Mental Component Summary of SF-12 (mean score)	50.8	49.8	50.3	50.9

SOURCE: Center for Financing, Access, and Cost Trends, Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey Household Component (MEPS-HC) 2004 Full-Year Public Use Files.
NOTES: "All adults" includes non-Hispanic black only, non-Hispanic other single or multiple race, and three cases with missing LEP status which are not shown. LEP is limited English proficient. EP is English proficient. NH is non-Hispanic.

†† Indicates significance between LEP Hispanic and EP Hispanic adults ($p \leq .01$) based on a 2-sided z-test.

‡‡ Indicates significance between EP Hispanic and NH white adults ($p \leq .01$) based on a 2-sided z-test.

Table 4: Health care utilization of adults aged 18 years and over by English proficiency: United States, 2004

Measures	All adults	LEP Hispanic		EP Hispanic	NH white	
Ambulatory visits						
Percentage with visits	73.2	46.2	††	58.1	78.4	‡‡
Average number for adults with visits	9.1	7.0		6.6	9.8	‡‡
Emergency department visits						
Percentage with visits	14.3	8.7	††	12.9	14.5	‡
Average number for adults with visits	1.4	1.2		1.3	1.4	
Hospital in-patient discharges						
Percentage with discharges	9.0	6.8		6.6	9.8	‡‡
Average number for adults with discharges	1.4	1.2		1.2	1.4	‡‡
Dental visits						
Percentage with visits	43.0	15.8	††	30.2	48.7	‡‡
Average number for adults with visits	2.4	2.0		2.1	2.4	‡‡
Prescription medicines						
Percentage with prescriptions	67.7	41.0	††	51.4	73.3	‡‡
Average number for adults with prescriptions	18.6	15.6		13.3	19.3	‡‡

SOURCE: Center for Financing, Access, and Cost Trends, Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey Household Component (MEPS-HC) 2004 Full-Year Public Use Files.
NOTES: "All adults" includes non-Hispanic black only, non-Hispanic other single or multiple race, and three cases with missing LEP status which are not shown. LEP is limited English proficient. EP is English proficient. NH is non-Hispanic. Ambulatory visits include visits to medical providers seen in office-based settings or clinics and also visits to both physicians and other medical providers seen in hospital outpatient departments. Emergency department visits include visits to medical providers seen in emergency rooms (except visits resulting in a hospital admission). Hospital admissions that did not involve an overnight stay are excluded from hospital in-patient discharges. Dental visits include visits for any type of dental care provider including general dentists, dental hygienists, dental technicians, dental surgeons, orthodontists, endodontists, and periodontists. Prescription medicines include all prescribed medications initially purchased or otherwise obtained during 2004, as well as any refills.

††Indicates significance between LEP Hispanic and EP Hispanic adults ($p \leq .01$) based on a 2-sided z-test.

‡Indicates significance between EP Hispanic and NH white adults ($.01 < p \leq .05$) based on a 2-sided z-test.

‡‡Indicates significance between EP Hispanic and NH white adults ($p \leq .01$) based on a 2-sided z-test.

Technical Appendix

Data Source

The estimates in this analysis are based on data obtained from the 2004 MEPS-HC full-year consolidated person-level file: HC-089 which is available at http://www.meps.ahrq.gov/mepsweb/data_stats/download_data_files_detail.jsp?cboPufNumber=HC-089.

Survey Design

Each year, the MEPS sample is drawn from households that completed the prior year's National Health Interview Survey (NHIS). Households selected for participation in the 2004 MEPS, completed interviews in the 2003 NHIS. Because NHIS is used as a sampling frame, the MEPS design is not only nationally representative of the civilian noninstitutionalized population but also includes an oversampling of Hispanics and blacks. MEPS collects data in an overlapping panel design. Each household completes five interviews ("rounds" of data collection) over a period of two-and-a-half years, providing data for two full calendar years of estimates. Data from Rounds 1, 2, and 3 provide information for the first year of estimation, and data from Rounds 3, 4, and 5 provide data for the second year of estimates. For example, estimates for 2004 are derived by combining Rounds 3, 4, and 5 of the 2003 panel and Rounds 1, 2, and 3 of the 2004 panel.

Definitions

Hispanic and specific Hispanic category
Classifications in this report by specific Hispanic category for Hispanics are based on the following five groups: Puerto Rican, Cuban/Cuban American, Mexican/Mexican American, Central or South American, and Other Hispanic. Classification by specific Hispanic category is based on information reported in MEPS for each family member. Respondents were asked if they consider themselves to be Hispanic or Latino and if so, then to choose the group that best describes their ethnic background from the following: Puerto Rican; Cuban/Cuban American; Dominican; Mexican; Mexican American; Central or South American; Other Latin American; or Other Hispanic/Latino. All other persons were considered to be non-Hispanic and were not included in this classification by specific Hispanic category.

Hispanic adults with limited English proficiency (LEP) and English-proficient Hispanic adults
Hispanic adults are defined as having limited English proficiency using the MEPS-HC if they: 1) lived in a household where a language other than English was being spoken most often, and 2) were reported as not being comfortable conversing in English. All other Hispanic adults are classified as being "English-proficient." Questions about English proficiency were asked in the Access to Care section of the MEPS-HC that was administered in Rounds 2 and 4.

Non-Hispanic white
Non-Hispanic white refers to non-Hispanic persons reported as having a single race category of white.

Age
For this report age refers to age at the time of the Rounds 2 and 4 interviews (Rounds in which the English-proficiency questions were asked) unless otherwise specified. Rounds 2 and 4 were administered in the second half of 2004.

Marital status
Classifications by marital status in this report are based on the following five groups: Married, spouse in house; Married, spouse not in house; Widowed; Divorced/Separated; and Never Married. This classification is based on current marital status that was collected and/or updated during Rounds 2 and 4 of the MEPS interview; and, on information about spouse living in the household obtained when the respondent was asked during Rounds 2 and 4

to identify how each pair of persons in the household were related. If no spouse was identified in the household, then persons were classified as having no spouse in the household.

Education when first entered survey
Classifications by education when first entered the survey are based on the following five groups: grades 0–6; grades 7–8; grades 9–11; high school graduate; and some college. Education when first entered survey is based on the first round in which the number of years of education is collected for a person.

Employment status
For this report employment status refers to employment status at the time of the Rounds 2 and 4 interviews and are based on the following two groups: employed; and not employed. Rounds 2 and 4 employment questions were asked of all persons 16 years of age and older at the time of interview.

Region
Each person was classified at the time of the Rounds 2 and 4 interviews as living in one of the following four regions defined by the U.S. Census Bureau:

- Northeast: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania.
- Midwest: Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas.
- South: Delaware, Maryland, West Virginia, District of Columbia, Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas.
- West: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Alaska, and Hawaii.

Family income
In this report, family income is expressed as a ratio of the family's total income to the Federal poverty thresholds that control for the size of the family and the age of the head of the family. Each adult was classified according to total 2004 income of his or her family being less than 200% of the federal poverty line (poor/low income) or 200% or more of the federal poverty line.

Health Insurance
For this report health insurance is at the individual level and is classified separately for ages 18–64 years and age 65 and over, where age is as of December 31, 2004.

Health insurance for adults ages 18–64 is classified hierarchically as having:

- "any private" if they were privately insured (including TRICARE/VA) at any point during 2004;
- "public only" if they did not have private insurance at any point during 2004 and did have Medicaid or some other public hospital/physician coverage at any point during 2004; and
- "uninsured" if they were uninsured during all of 2004.

Health insurance for adults age 65 and over is classified hierarchically as having:

- "Medicare and private" if they were Medicare beneficiaries with a private insurance policy at some point during 2004;
- "Medicare and public" if they were Medicare beneficiaries who were not covered by private insurance at any point during 2004 and were covered by Medicaid or some other public hospital/physician coverage at some point during 2004;
- "Medicare only" if they were Medicare beneficiaries who were not covered by private insurance nor with any public insurance at any point during 2004; and
- "Other" includes all other persons age 65 and over.

Receipt of language assistance
Hispanic adults with limited English proficiency and a usual source of care are classified as having or not having received language assistance at the usual source of care.

Health status measures
Two types of health status measures are examined: self-assessment measures of general physical health status and of general mental health status; and the Short-Form 12, Version 2 Health Survey. The self-assessment measures of general physical health status and of general mental health status are classified into the following two groups: Excellent/very good/good; and fair/poor. The SF-12v2™ is a set of 12 questions from which a physical health component and a mental health component summary scores are obtained; higher scores denote better functioning and well-being.

Utilization measures
Utilization data are shown separately in five broad categories in this report: Ambulatory visits, emergency department visits; hospital in-patient discharges; dental visits; and prescription medicines.

- Ambulatory visits: This category includes visits to medical providers seen in office-based settings or clinics and also for visits to both physicians and other medical providers seen in hospital outpatient departments.
- Emergency department visits: This category includes visits to medical providers seen in emergency rooms (except visits resulting in a hospital admission).
- Hospital in-patient discharges: Hospital admissions that did not involve an overnight stay are excluded.
- Dental visits: This category includes visits for any type of dental care provider, including general dentists, dental hygienists, dental technicians, dental surgeons, orthodontists, endodontists, and periodontists.
- Prescription medicines: This category includes all prescribed medications initially purchased or otherwise obtained during 2004, as well as any refills.

Standard Error Tables

Table A: Standard errors for percentage distribution of adults aged 18 years and over by demographic characteristics and English proficiency: United States, 2004

Corresponds to Table 1

Characteristics	All adults	LEP Hispanic	EP Hispanic	NH white
Estimated population (in thousands) (sample size)				
Age				
18–44 years	0.57	2.24	1.02	0.66
45–64 years	0.43	1.74	0.81	0.52
65 years and over	0.43	1.24	0.64	0.54
Sex				
Male	0.29	1.44	0.90	0.35
Female	0.29	1.44	0.90	0.35
Specific Hispanic category				
Puerto Rican	0.14	1.04	1.23	
Cuban/Cuban American	0.06	1.02	0.37	
Mexican/Mexican American	0.51	2.42	2.29	
Central or South American	0.16	1.78	1.39	
Other Hispanic	0.08	0.93	0.75	
Marital Status				
Married, Spouse in house	0.55	2.26	1.17	0.65
Married, Spouse not in house	0.11	0.72	0.30	0.11
Widowed	0.23	0.75	0.40	0.29
Divorced/Separated	0.32	1.10	0.75	0.39
Never Married	0.46	2.22	1.03	0.55
Education when first entered survey				
grades 0–6	0.19	2.24	0.62	0.11
grades 7–8	0.13	0.87	0.37	0.15
grades 9–11	0.33	1.85	0.87	0.37
High school graduate	0.49	1.51	1.06	0.62
Some college	0.66	1.32	1.27	0.79
Employment Status—ages 18–64				
Employed	0.40	1.57	0.82	0.48
Not-employed	0.40	1.57	0.82	0.48
Region				
Northeast	0.73	2.01	1.71	0.95
Midwest	0.91	1.91	1.13	1.09
South	1.08	3.57	2.77	1.24
West	0.95	3.65	2.38	0.95
Residence				
MSA	1.26	1.93	1.79	1.45
Non-MSA	1.26	1.93	1.79	1.45
Family income[a]				
<200% of poverty line	0.59	2.34	1.50	0.63
≥ 200% of poverty line	0.59	2.34	1.50	0.63

SOURCE: Center for Financing, Access, and Cost Trends, Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey Household Component (MEPS-HC) 2004 Full-Year Public Use Files.

NOTES: "All adults" includes non-Hispanic black only, non-Hispanic other single or multiple race, and three cases with missing LEP status which are not shown. LEP is limited English proficient. EP is English proficient. NH is non-Hispanic.

[a] Adults from families with income less than 200% of federal poverty line or 200% or more of federal poverty line. The poverty line is based on family size and composition as defined by the U.S. Census Bureau. [Ref. U.S. Census Bureau. Poverty: How the Census Bureau measures poverty. August 2, 2005. Available at: http://www.census.gov/hhes/www/poverty/povdef.html]

Table B: Standard errors for percentage distribution of adults aged 18 years and over by access to care indicators and English proficiency: United States, 2004

Corresponds to Table 2

Indicators	All adults	LEP Hispanic	EP Hispanic	NH white
Health Insurance—ages 18–64				
Any private	0.62	2.00	1.44	0.60
Public only	0.33	1.14	0.83	0.32
Uninsured	0.47	2.18	1.18	0.46
Health Insurance—ages 65 and over				
Medicare only	1.04	3.70	3.96	1.22
Medicare and private	1.17	2.03	4.78	1.32
Medicare and public only	0.66	4.87	3.37	0.58
Other	0.17	3.37	1.10	0.11
Has usual source of medical care[a]				
Yes	0.48	2.23	1.21	0.53
No	0.48	2.23	1.21	0.53
Receipt of language assistance at the usual source of care for Hispanics with LEP and with a usual source of care				
Yes		1.77		
No		1.77		
Percentage of adults with an illness or injury that needed medical care right away	0.44	1.38	1.11	0.55
Percentage distribution of how often the care was received as soon as wanted				
Never/sometimes	0.55	3.37	1.77	0.63
Usually	0.64	4.14	2.06	0.82
Always	0.76	3.70	2.38	0.93
Percentage of adults who they or a doctor thought they needed to see a specialist	0.47	1.78	0.96	0.60
Percentage distribution by extent of problem in getting a referral to a specialist				
A big problem	0.38	2.12	1.55	0.41
A small problem	0.59	3.40	2.19	0.71
Not a problem	0.66	3.85	2.28	0.77
Not a problem	0.66	3.85	2.28	0.77

SOURCE: Center for Financing, Access, and Cost Trends, Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey Household Component (MEPS-HC) 2004 Full-Year Public Use Files.

NOTES: "All adults" includes non-Hispanic black only, non-Hispanic other single or multiple race, and three cases with missing LEP status which are not shown. LEP is limited English proficient. EP is English proficient. NH is non-Hispanic. Adults 18–64 were classified as having "any private" if they were privately insured (including TRICARE/VA) at any time during the year; "public only" if they had only public insurance during the year; and "uninsured" if they were uninsured for the entire year. Adults 65 and over were classified as having Medicare, and whether or not in addition they had any private, or public only.

[a] Refers to a particular doctor's office, clinic, health center, or other place where a person usually goes if he or she is sick or needs advice about personal health matters.

Table C: Standard errors for health status estimates of adults aged 18 years and over by ethnicity and English proficiency: United States, 2004
Corresponds to Table 3

Measures	All adults	LEP Hispanic	EP Hispanic	NH white
Physical Health Status				
Excellent/very good/good	0.31	1.38	0.73	0.38
Fair/poor	0.31	1.38	0.73	0.38
Mental Health Status				
Excellent/very good/good	0.25	0.89	0.52	0.29
Fair/poor	0.25	0.89	0.52	0.29
Physical Component Summary of SF-12 (mean score)	0.11	0.41	0.24	0.13
Mental Component Summary of SF-12 (mean score)	0.11	0.40	0.26	0.12

SOURCE: Center for Financing, Access, and Cost Trends, Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey Household Component (MEPS-HC) 2004 Full-Year Public Use Files.
NOTES: "All adults" includes non-Hispanic black only, non-Hispanic other single or multiple race, and three cases with missing LEP status which are not shown. LEP is limited English proficient. EP is English proficient. NH is non-Hispanic.

Table D: Standard errors for health care utilization estimates of adults aged 18 years and over by English proficiency: United States, 2004

Corresponds to Table 4

Health care utilization	All adults	LEP Hispanic	EP Hispanic	NH white
Ambulatory visits				
Percentage with visits	0.47	1.90	1.19	0.50
Average number for adults with visits	0.16	0.55	0.26	0.19
Emergency department visits				
Percentage with visits	0.31	0.81	0.73	0.40
Average number for adults with visits	0.02	0.05	0.05	0.02
Hospital in-patient discharges				
Percentage with discharges	0.24	0.65	0.49	0.31
Average number for adults with discharges	0.02	0.07	0.04	0.02
Dental visits				
Percentage with visits	0.59	1.25	1.36	0.67
Average number for adults with visits	0.03	0.11	0.08	0.03
Prescription medicines				
Percentage with prescriptions	0.53	2.11	1.00	0.59
Average number for adults with prescriptions	0.30	1.08	0.61	0.34

NOTES: "All adults" includes non-Hispanic black only, non-Hispanic other single or multiple race, and three cases with missing LEP status which are not shown. LEP is limited English proficient. EP is English proficient. NH is non-Hispanic. Ambulatory visits include visits to medical providers seen in office-based settings or clinics and also visits to both physicians and other medical providers seen in hospital outpatient departments. Emergency department visits include visits to medical providers seen in emergency rooms (except visits resulting in a hospital admission). Hospital admissions that did not involve an overnight stay are excluded from hospital in-patient discharges. Dental visits include visits for any type of dental care provider including general dentists, dental hygienists, dental technicians, dental surgeons, orthodontists, endodontists, and periodontists. Prescription medicines include all prescribed medications initially purchased or otherwise obtained during 2004, as well as any refills.