

Understanding the Health Needs of Diverse Groups of Hispanic Medicare Beneficiaries

Douglas Ritenour, MPH, Jael Rodriguez, MPH, Shondelle Wilson-Frederick, PhD, Laura A. Giordano, RN, MBA, Beth Gualtieri, RN, BSN^a

Introduction

The Hispanic population is the largest ethnic or racial minority group in the United States.¹ By 2060, it is expected that Hispanics will encompass nearly 30% of the total population, substantially increasing its size from 17.8% in 2016.^{2,3} In 2010, Hispanic adults constituted 6.9% of the population 65 and over. By 2050, the U.S. Census Bureau projects that this group will represent 18.4% of the older population,⁴ which will likely be reflected by similar growth in its share of the Medicare population. The U.S. Hispanic population represents a highly heterogeneous group, and their continued population growth warrants additional research to improve understanding of their health needs.

Many studies that examine health issues experienced by Hispanics/Latinos often aggregate the heterogeneous population into a single ethnic category, failing to acknowledge variations observed among detailed groups. These studies may be unable to report data for detailed Hispanic groups due to sample size constraints, but even in studies with large samples, data limitations may still only permit the presentation of estimates for selected detailed Hispanic groups.

Having nationally representative data sources that provide granular information for detailed Hispanic groups enables proper identification of health disparities and of appropriate cultural and linguistic services to eliminate these disparities. In 2011, the U.S. Department of Health and Human Services (HHS) adopted data collection standards for federally sponsored population surveys that included additional granularity for Hispanic or Latino ethnicity, Asian, Native Hawaiian, and Other Pacific Islanders, and specific categories

Key Findings:

At least half of all Hispanic beneficiaries (50.2%) reported fair or poor health. Significant differences were observed across Hispanic groups reporting fair or poor health, ranging from 42.5% of Cubans to 55.8% of Puerto Ricans.

The rate of positive depression screen was significantly different across Hispanic groups. Among beneficiaries, the rate of positive depression screen was observed in 25.2% of Cubans and 34.9% of Multi-ethnic Hispanics.

With the exception of Cubans (31%), at least one-third of beneficiaries in each Hispanic group were classified as obese. Nearly two out of five (39.8%) Mexican beneficiaries were classified as obese.

Nearly one-third (31%) of Hispanics reported that pain had interfered with daily activities quite a bit or very much over the past seven days. Rates of pain interfering with daily activities ranged significantly across groups from 24.3% of Cubans to 37.4% of Puerto Ricans.

More than half of Hispanic beneficiaries (56%) reported less than ideal average sleep duration (< 7 hours) and these rates ranged from 49.3% for Mexicans to 61.5% for Puerto Ricans.

Data Source: The 2013–2015 Medicare Health Outcomes Survey (HOS) Baseline Cohorts 16, 17, and 18

^aAuthor Affiliations: Written by Douglas Ritenour, Jael Rodriguez, Laura Giordano, and Beth Gualtieri, at the Health Services Advisory Group, in collaboration with Shondelle Wilson-Frederick at the CMS Office of Minority Health (OMH).

for sex, primary language, and disability status collected in population health surveys. These standards strengthen federal data collections by providing guidance on demographic data collections for diverse populations.

Since 2013, the Centers for Medicare & Medicaid Services (CMS) Medicare Health Outcomes Survey (HOS) has been collecting data on the health status of detailed Hispanic groups who are enrolled in Medicare Advantage and Medicare Advantage Prescription Drug Plans. This data highlight presents findings for Hispanic beneficiaries from the 2013–2015 HOS *Baseline Cohorts 16, 17, and 18*. The HOS is a longitudinal survey that measures Medicare Advantage Organization (MAO) plans’ success in maintaining or improving the physical and mental health of beneficiaries.⁵ Sampling weights have not been included in the methodological design of the HOS since its inception. The HOS has used a simple random sampling design rather than a complex survey sampling design. The HOS instrument was designed to satisfy the programmatic purposes of measuring health plan quality. The three cross-sectional cohorts included Medicare beneficiaries enrolled in MAOs who were ages 65 and over, as well as disabled beneficiaries less than 65 years old. Hispanic beneficiaries (n=89,008) included people who self-identified as Cuban, Puerto Rican, Mexican, Other Hispanic, or Multi-ethnic. Health status results presented in this brief include self-rated general health status, number of days with activity limitations, rate of depression, prevalence of obesity, two measures of recent pain, and two new measures of sleep health.

Keywords

Health Outcomes Survey, Medicare, Health Status, Detailed groups, Hispanic, Ethnicity

Results

Figure 1: Demographic distribution of detailed Hispanic groups

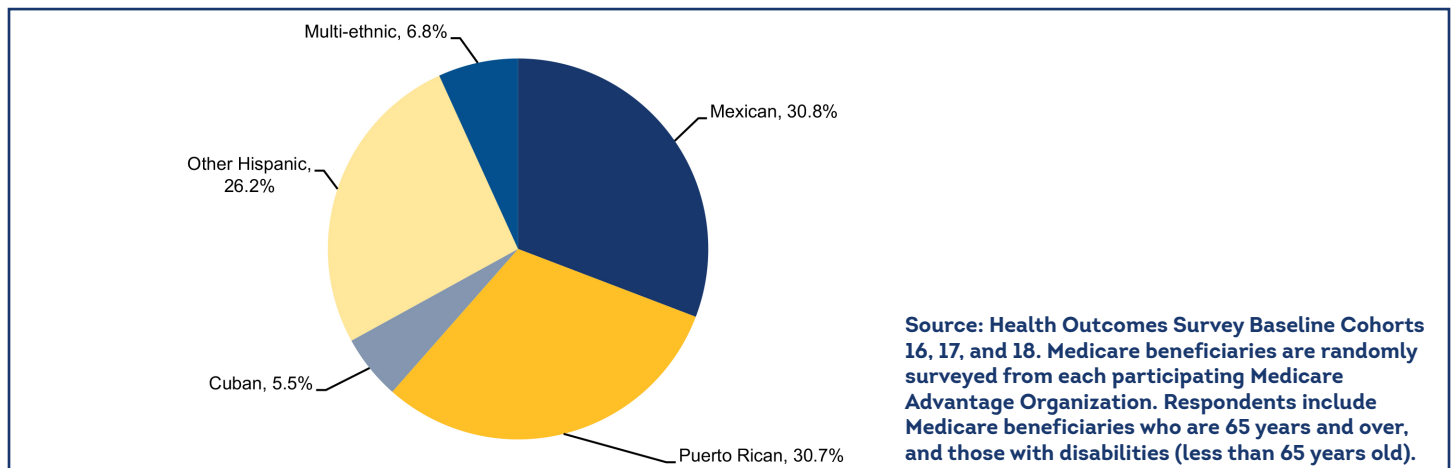
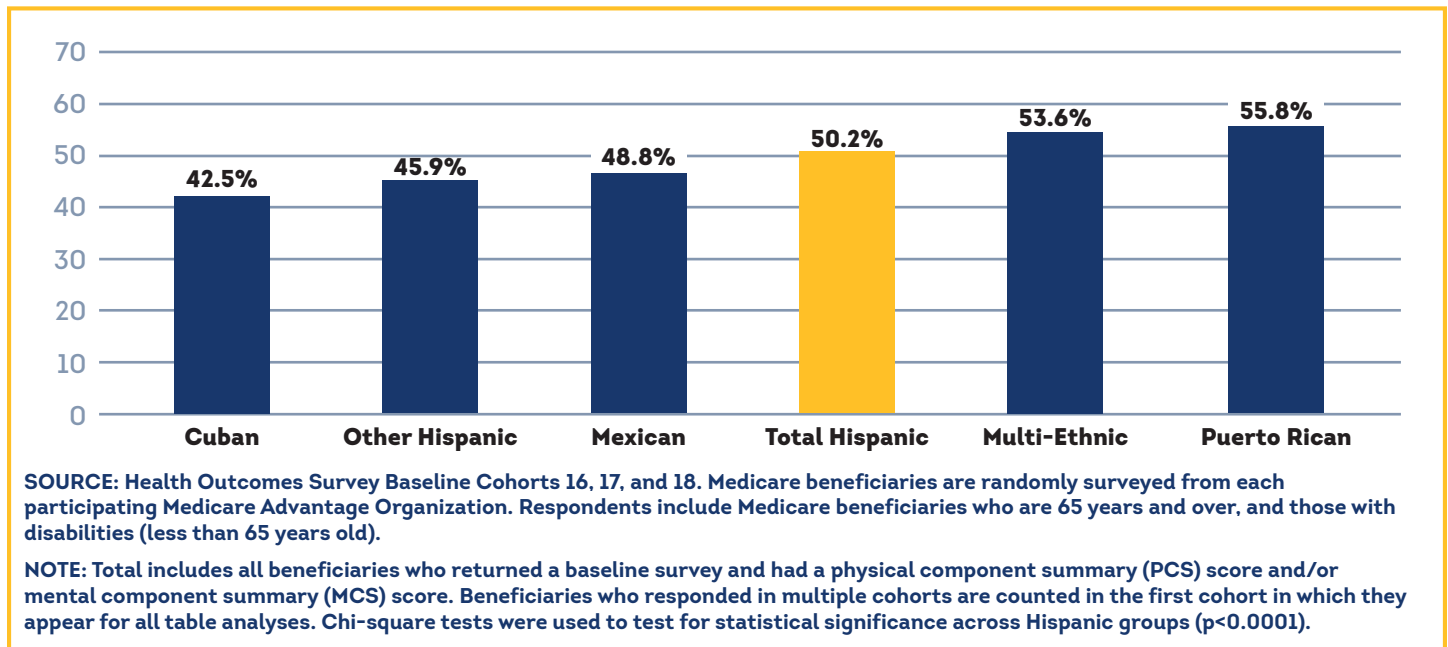


Figure 1 shows the distribution of Medicare beneficiaries among Hispanic groups. In the subsequent bar graphs, the “Total Hispanic” group represents the sum of all Hispanic groups.

Among Hispanic HOS respondents, more than half (61.5%) self-identified as either Mexican or Puerto Rican, 26.2% were Other Hispanic, and fewer self-identified as Multi-ethnic (6.8%) and Cuban (5.5%).

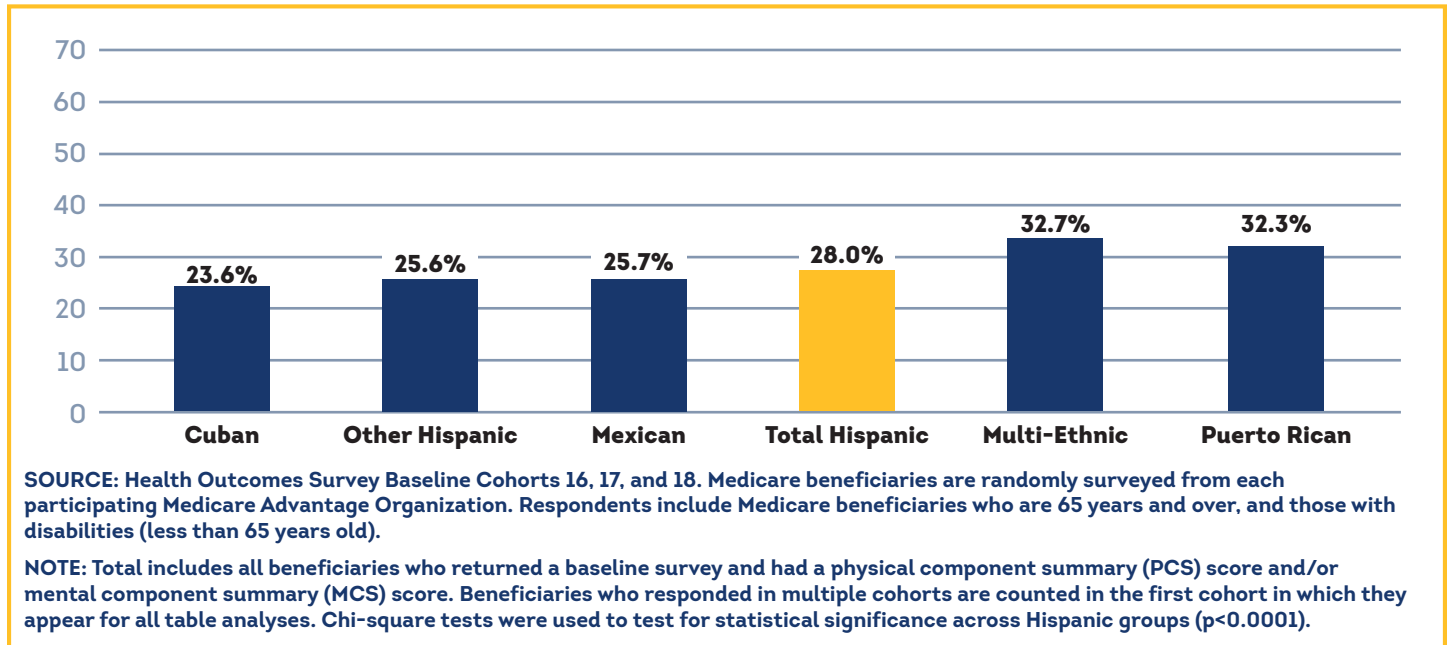
Figure 2: Self-rated fair or poor general health among Hispanic Medicare beneficiaries



Self-rated general health status is a valid and reliable method for assessing health across different populations.⁶ Individuals with fair or poor general health are known to be at increased risk for future hospitalization, use of mental health services, and mortality.^{7, 8}

Figure 2 presents self-reported general health for Hispanic beneficiaries. Just over half of Hispanics (50.2%) reported fair or poor health. Significant differences were observed in self-rated general health across Hispanic groups. Among Hispanic Medicare beneficiaries, more than half of Multi-ethnic Hispanics (53.6%) and Puerto Ricans (55.8%) rated their health as fair or poor while more than two out of five Cubans (42.5%) rated their health as fair or poor.

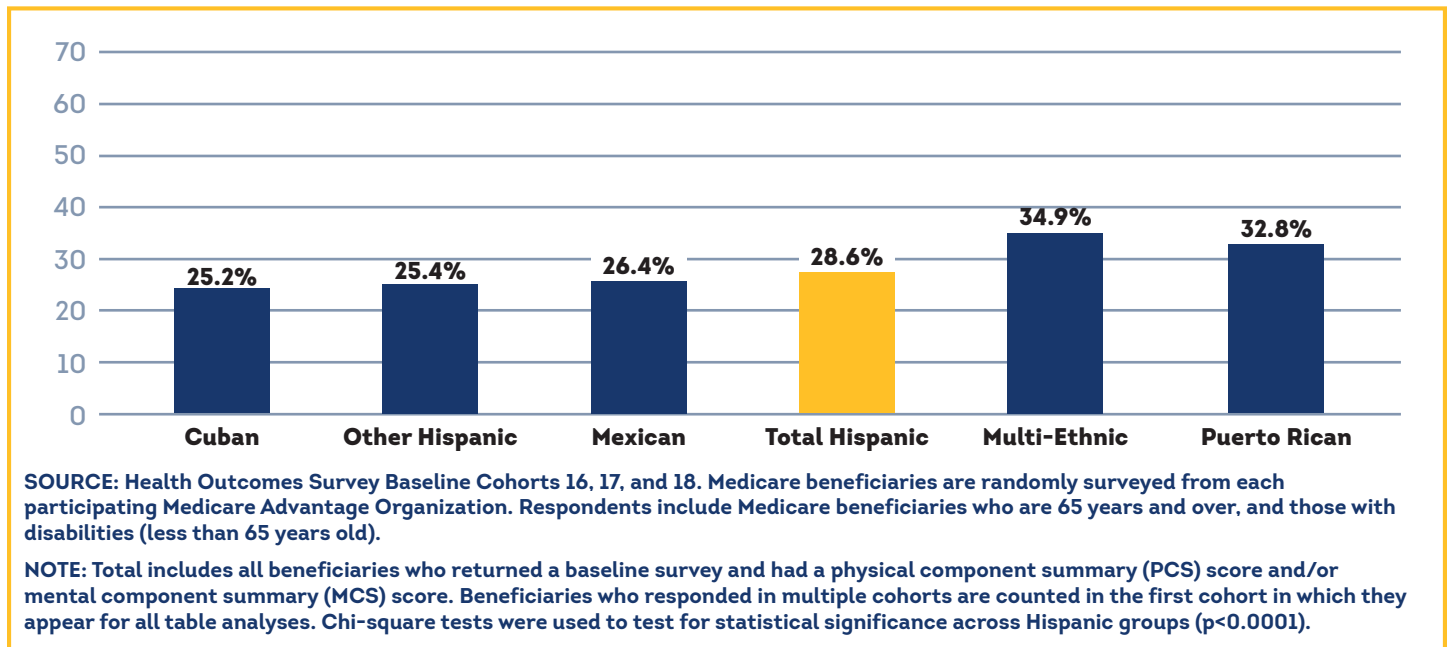
Figure 3: Hispanic Medicare beneficiaries reporting 14–30 days with activity limitations



Days with activity limitations is a self-reported HOS measure of the number of days during the past 30 days when poor physical or mental health kept the beneficiary from usual activities. Healthy Days Measures provide key information on the functional status of vulnerable subpopulations, and are used to assess the Health-Related Quality of Life across the U.S.⁹

As Figure 3 shows, 28.0% of Hispanics reported 14–30 days with activity limitations. There were significant differences in the reported number of days with activity limitations across Hispanic groups. Across the groups, percentages ranged from 23.6% of Cuban to 32.3% of Puerto Rican and 32.7% of Multi-ethnic Hispanic beneficiaries.

Figure 4: Prevalence of positive depression screen among Hispanic Medicare beneficiaries

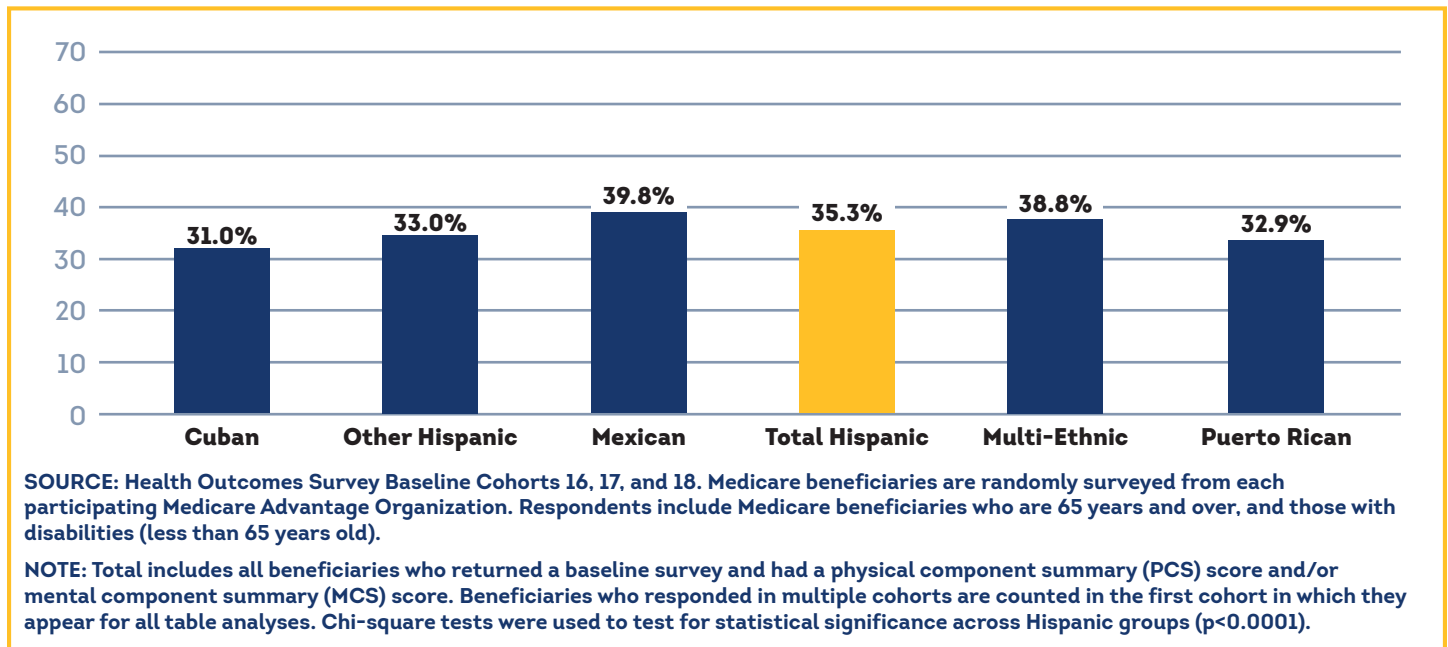


The HOS includes two items (Questions 39a and 39b) that serve as a screening measure for depression. The question stem asks, “Over the past two weeks, how often have you been bothered by any of the following problems?” Two response opportunities are provided, (Q39a) “little interest or pleasure in doing things” and (Q39b), “feeling down, depressed, or hopeless.” Each response is assigned points depending on the response given, from 0 (“not at all”) to 3 (“nearly every day”). A Medicare beneficiary is considered to have a positive depression screen when he or she scores three points or greater on the combined total points of the two depression items. Additionally, depression is significantly associated with other psychological dysfunction, as well as the presence of common chronic medical conditions, such as diabetes.^{10, 11}

Figure 4 shows individuals with a positive depression screen who may be at risk for depressive disorders.

Over one quarter of Hispanic beneficiaries (28.6%) screened positive for depression. The rate of positive depression screen was found to be significantly different across Hispanic groups. The rates of positive depression screen ranged from 25.2% and 25.4% of Cubans and Other Hispanics, respectively, to 34.9% of Multi-ethnic Hispanic beneficiaries.

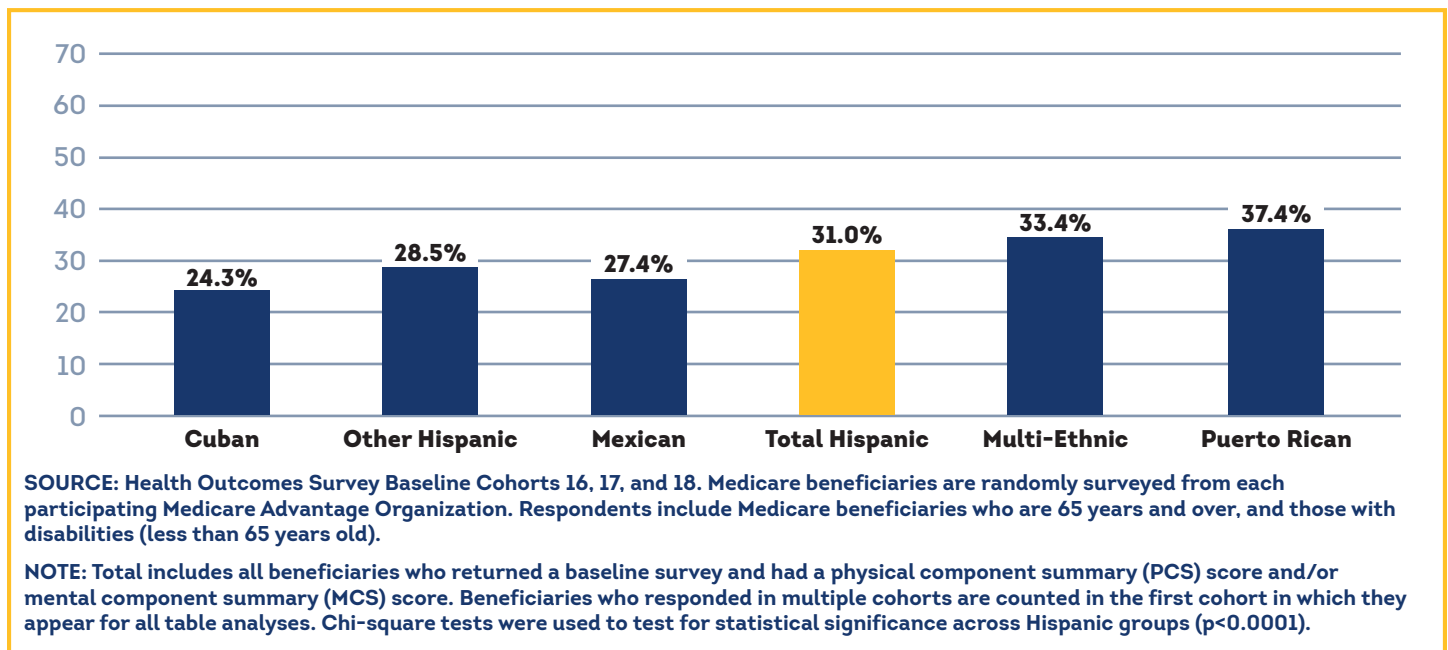
Figure 5: Prevalence of obesity among Hispanic Medicare beneficiaries



Self-reported height and weight values are used to calculate Body Mass Index (BMI), a measure that correlates with the amount of body fat in adult men and women. A BMI of 30 or higher is considered obese and increases risk for several chronic conditions including: hypertension, dyslipidemia, Type 2 diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea, and some cancers.¹²

Overall, 35.3% of Hispanics were classified as obese. Significant differences were observed in obesity prevalence across Hispanic groups, ranging from 31.0% of Cuban to 39.8% of Mexican beneficiaries.

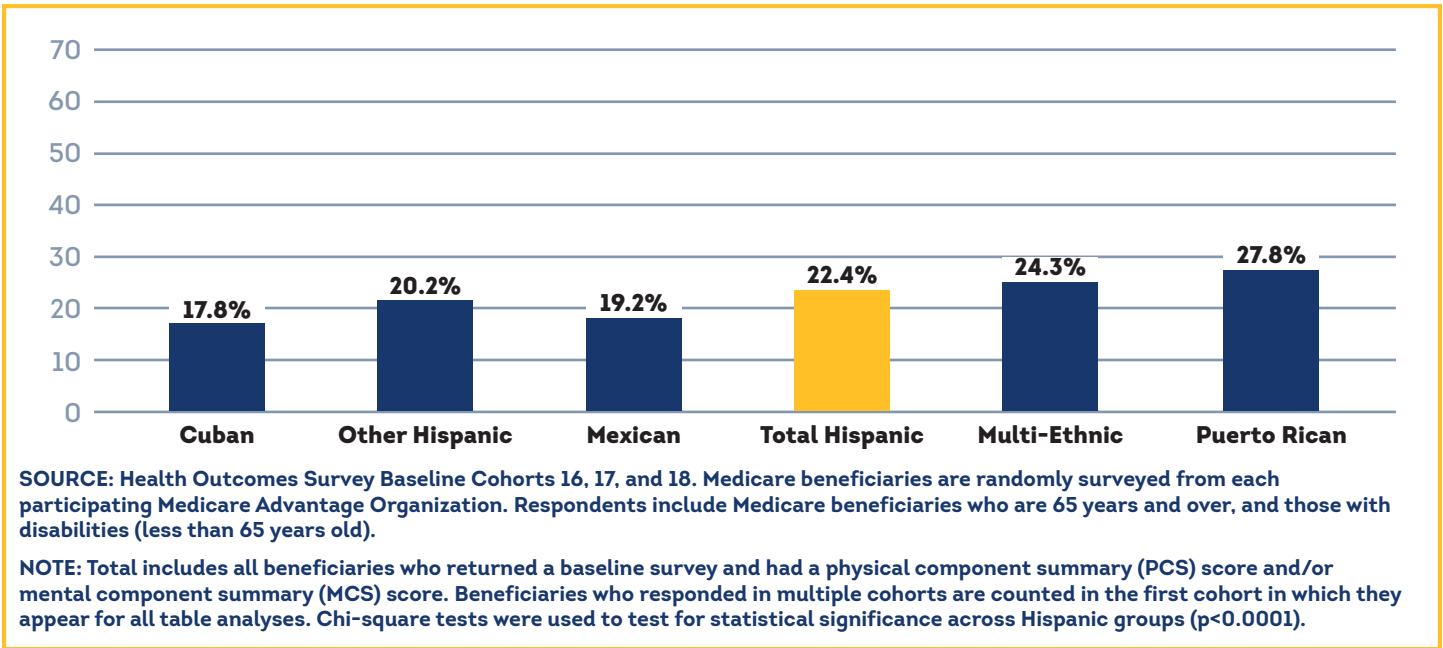
Figure 6: Prevalence of pain interfering with daily activities quite a bit to very much among Hispanic Medicare beneficiaries



The HOS includes questions to measure self-reported pain over the previous seven days. Question 36 asks how much pain interfered with day-to-day activities and Question 37 asks how often pain kept the beneficiary from socializing. Self-reported pain is common among older adults. Without proper pain management, opioid abuse^{13, 14} and alcohol abuse¹⁵ are increasing in this population as they attempt to control their pain. Pain screening is the initial step in establishing an appropriate pain management program for older beneficiaries.

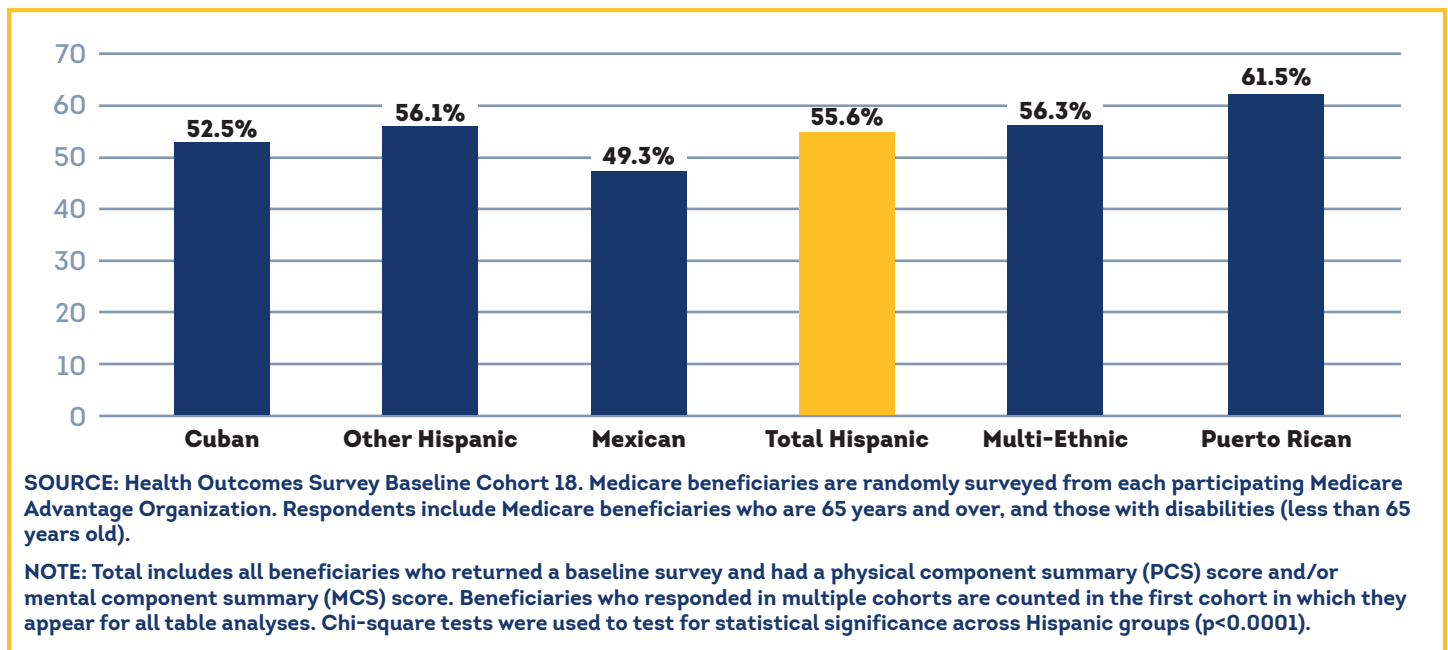
Figure 6 shows that nearly one-third (31.0%) of Hispanics reported that pain interfered with daily activities “Quite a bit” or “Very much” over the previous seven days. There were significant differences across Hispanic groups reporting the highest levels of pain interfering with daily activities, ranging from 24.3% of Cubans to 37.4% of Puerto Ricans.

Figure 7: Prevalence of pain interfering with socializing often or always among Hispanic Medicare beneficiaries



This figure shows that 22.4% of Hispanic beneficiaries reported that pain interfered “Often” or “Always” when socializing over the previous seven days. The rate of pain interfering with social activities varied significantly across Hispanic groups, from 17.8% of Cubans to 27.8% of Puerto Ricans.

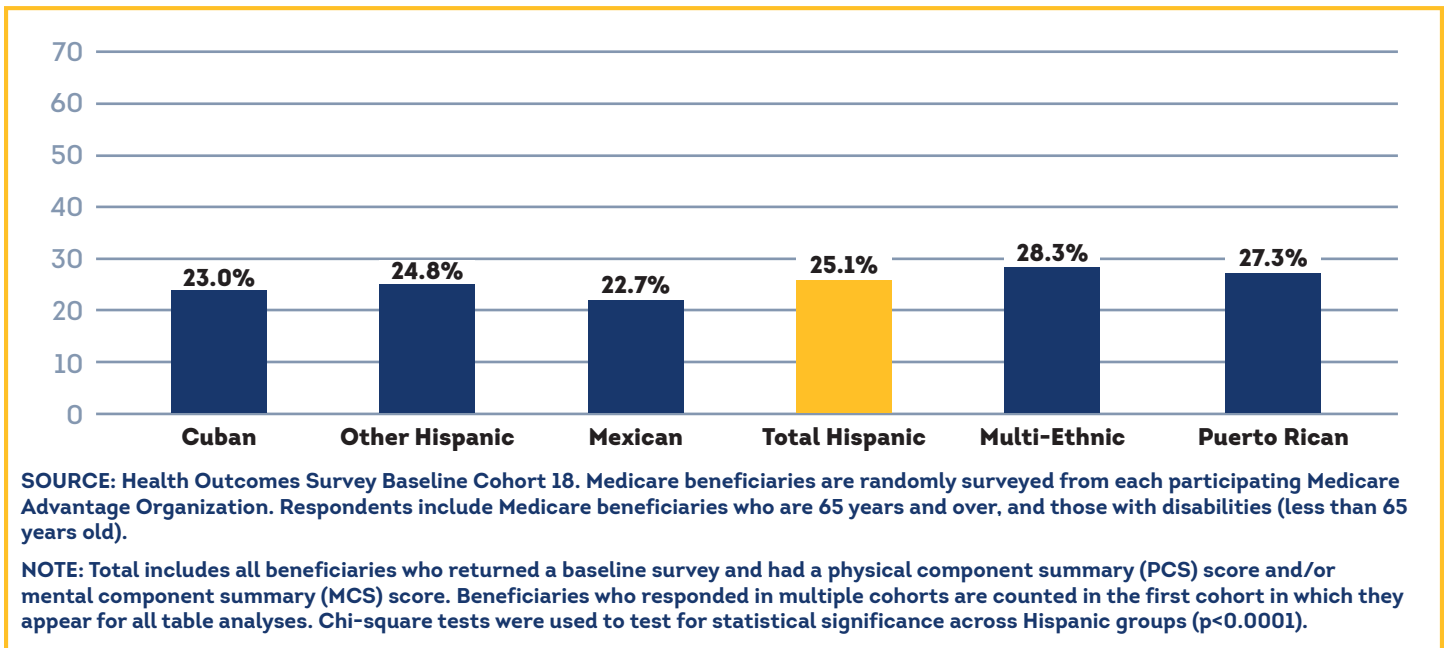
Figure 8: Hispanic Medicare beneficiaries reporting less than ideal average sleep duration (< 7 hours) during past month, HOS Baseline Cohort 18



Two new sleep questions in the HOS Baseline Cohort 18, focus on “habitual” (i.e., past month) sleep duration (“Less than 5 hours,” “5-6 hours,” “7-8 hours,” or “9 or more hours”), and quality (“Very good,” “Fairly good,” “Fairly bad,” or “Very bad”) in order to capture more chronic sleep disturbances. There is substantial evidence linking insufficient sleep duration and poor sleep quality to mental and physical health morbidity and mortality.¹⁶

Figures 8 and 9 present data from the sleep questions introduced in HOS Baseline Cohort 18. The percentages of Hispanic beneficiaries reporting less than the ideal average of 7-8 hours sleep duration in the past month are shown in Figure 8. Over half of Hispanics (55.6%) reported less than 7-8 hours of sleep. Across Hispanic groups, there were significant differences in the percentages of beneficiaries reporting less than ideal sleep. These percentages ranged from 49.3% of Mexicans to 61.5% of Puerto Rican beneficiaries.

Figure 9: Hispanic Medicare beneficiaries reporting fairly bad or very bad sleep quality, HOS Baseline Cohort 18



In addition to sleep duration, the HOS also reports on sleep quality. Figure 9 shows that one quarter (25.1%) of Hispanics reported fairly bad or very bad sleep quality. Similar to sleep duration, there were also significant differences among Hispanic groups for sleep quality. Fairly bad or very bad sleep ranged from 22.7% of Mexicans to 28.3% of Multi-ethnic beneficiaries.

Conclusion

The HHS demographic data collection standards provide additional granularity for Asian, Native Hawaiian, Other Pacific Islanders, and Hispanic or Latino ethnicity, and specific categories for sex, primary language, and disability status collected in population health surveys. This added level of detail enhances the ability of public health professionals to identify and monitor the health and health care status of diverse population groups. To be sure, this data highlight provides a unique tool to explore and better understand the health status and, consequently, the health needs of Hispanic Medicare beneficiaries.

The Medicare HOS provides CMS with an important data resource for tracking the health status of Medicare Advantage beneficiaries to address disparities among diverse groups. While the HOS includes a number of important measures, this brief focuses on self-rated general health, days with activity limitations, depression, obesity prevalence, sleep duration and quality, and pain interfering with daily and social activities. Data from the 2013-2015 HOS Baseline Cohorts 16, 17, and 18 demonstrate that within the five detailed Hispanic groups there was considerable variation in health status across many measures including: self-rated general health, positive depression screen, days with activity limitations, prevalence of obesity, pain interfering with daily and social activities, and two new measures available in HOS Cohort 18, sleep duration and quality. These findings demonstrate that stratifying health data for detailed Hispanic groups reveals unique and significant differences otherwise masked by aggregate analyses.

Distributions of age, gender, marital status, education, English proficiency, English spoken at home, annual household income, and Medicaid status are found in Table 1 of the Appendix. The demographic characteristics of Hispanic beneficiaries show interesting results across the age categories, and the relationship between English proficiency and educational attainment. The age distribution among Hispanic groups shows that 23.5% of Cuban beneficiaries were 80 years or older compared to only 15.5% of the total Hispanic beneficiary population. However, 9.6% of the Cuban beneficiaries were under the age of 65 years old, compared to 21.8% of all Hispanic beneficiaries. Fewer than one-in-ten Hispanic beneficiaries reported having a four year college degree or more, compared to 17.1% Cuban and 12.5% of Puerto Rican beneficiaries. However, higher levels of educational attainment among Cubans and Puerto Ricans were not associated with similarly high levels of reported English proficiency when compared to other Hispanic groups. Compared to more than a third (34.2%) of all Hispanics, only 19.5% of Cuban and 17.5% of Puerto Ricans reported speaking English “very well.” Various factors could play a role in the inverse relationship between education and English proficiency, including the fact that Cuban and Puerto Rican beneficiary populations are more geographically concentrated relative to Mexican, Multi-ethnic, and Other Hispanic groups. Of note, the HOS is administered to MAO beneficiaries who reside in the U.S. territory of Puerto Rico. Proficiency in the English language is often lower among Hispanic populations that are linguistically isolated.¹⁷ This may explain why only 16% of Cuban and 12.7% of Puerto Rican beneficiaries report speaking English at home, compared to 33.9% of the total Hispanic beneficiary population.

The Appendix table of demographic information is included at the end of this data highlight.

Definitions

General Health

General health status is a self-reported measure of health perception with response categories of “excellent,” “very good,” “good,” “fair,” or “poor.” For this analysis, a binary general health variable was created and classified as: 1) “excellent” or “very good” or “good” and 2) “fair” or “poor.”

Healthy Days Measures

“Days with activity limitations” is a self-reported measure of the number of days during the past 30 days when poor physical or mental health kept the beneficiary from doing usual activities. The Healthy Days Measures provide key information on the functional status of vulnerable sub-populations and are used to assess the Health-Related Quality of Life (HRQOL)¹⁸ across the U.S. For this analysis, a binary healthy days measure was created and classified as: 1) 0-13 unhealthy days and 2) 14-30 unhealthy days.

Depression

The HOS includes two questions that serve as a screening measure for depression. The questions require the beneficiary to qualify the statements “little interest or pleasure in doing things in past two weeks” as well as “feeling down, depressed, or hopeless in past two weeks.” Each question is assigned points depending on the response given, from 0 (“not at all”) to 3 (“nearly every day”). A beneficiary is considered to have a positive depression screen when he or she scores three points or greater on the combined total points of the two depression questions.

Body Mass Index

Body mass index (BMI) is a measure that approximates the amount of body fat in an individual and is calculated through self-reported height and weight. BMI is calculated by dividing weight in pounds (lb.) by height in inches (in.) squared and multiplying by a conversion factor of 703 ($BMI = [\text{weight in pounds}/(\text{height in inches})^2] \times 703$).¹⁹ BMI follows a standard categorization that includes underweight (below 18.50), normal weight (18.50-24.99), overweight (25.00-29.99), and obese (30.00 and above).

Pain Measures

The HOS includes two questions to measure self-reported pain over the previous seven days. The first question asks the beneficiary to determine how much pain interfered with day-to-day activities, with response choices of “Not at all,” “A little bit,” “Somewhat,” “Quite a bit,” or “Very much.” The second question asks how often pain kept the beneficiary from socializing, with response categories of “Never,” “Rarely,” “Sometimes,” “Often,” or “Always.”

Sleep Measures

Two new sleep questions in the HOS 3.0 were drawn from the Pittsburgh Sleep Quality Index (PSQI). The questions focus on “habitual” (i.e., past month) sleep duration and quality, rather than past week measures, in order to capture more chronic sleep disturbances. The PSQI has a high test-retest reliability and good validity in patients with insomnia.²⁰ For this analysis, binary indicators were created for both sleep duration and sleep quality. Sleep duration was classified as: 1) less than 5 hours or 5-6 hours and 2) 7-8 hours or 9 or more hours. Sleep quality was classified as: 1) very good or fairly good and 2) fairly bad or very bad.

Data Sources and Methods

The Medicare Health Outcomes Survey (HOS) is a national survey that measures health plans' success in maintaining or improving beneficiaries' physical and mental health. The HOS is the first patient-reported outcomes survey used in Medicare managed care.⁵ Each spring, a random sample of Medicare beneficiaries is drawn and surveyed from each participating Medicare Advantage Organization (MAO) with a minimum of 500 enrollees (i.e., a survey is administered to a different baseline cohort, or group, each year). Two years later, the baseline respondents are surveyed again (i.e., follow up measurement). The HOS is a patient-reported mail survey with telephone follow-up in those instances when beneficiaries fail to respond. In April 2013, following the implementation of the *HHS Data Collection Standards for Race, Ethnicity, Sex, Primary Language, and Disability Status*, the HOS became the first large-scale CMS survey to collect expanded measures of race, ethnicity, sex, primary language, and disability status. More information about the HOS is available at www.HOSonline.org.

These analyses describe the health of Hispanic respondents from the combined survey data in the 2013–2015 HOS Baseline Cohorts 16, 17, and 18. The HOS health status items were collected with the HOS 2.5 instrument for Cohort 16 and Cohort 17, and the HOS 3.0 instrument for Cohort 18. The eligible sample for these analyses was derived from beneficiaries who completed the HOS survey in Baseline Cohort 16 (n=272,936), Baseline Cohort 17 (n=261,638), and Baseline Cohort 18 (n=256,735). For the purposes of this report, a completed survey is defined as one that could be used to calculate a physical component summary (PCS) score or mental component summary (MCS) score.

Eligible respondents (n=791,309) included both beneficiaries ages 65 years and over (n=663,119) and beneficiaries under age 65 (n=128,190), who are classified as disabled by CMS. For those beneficiaries who were respondents in more than one baseline cohort (n=35,056), their first complete survey was used for these analyses. Of the remaining respondents in Baseline Cohorts 16–18 (n=756,253), the analytic sample was drawn from beneficiaries who selected one or more Hispanic ethnicity categories (n=89,008). The Hispanic category includes beneficiaries who self-identified as Cuban, Puerto Rican, Mexican, Other Hispanic, or Multi-ethnic. The Multi-ethnic category includes respondents who selected more than one Hispanic group. The Hispanic category also includes beneficiaries who selected one or more race categories (n=64,058). Using the Chi-square test, statistically significant differences across groups are noted (p-value <0.05). The appendix table is provided to show demographic characteristics by Hispanic group.

Limitations

The analyses presented in this data highlight used cross-sectional baseline data, not the longitudinal data that are available in the HOS. Therefore, trends and changes in health status are not presented in this data highlight.

Beneficiaries with disabilities (less than age 65) are included in the analytic sample, and, as a result, all results presented for Hispanic respondents in this data highlight include these beneficiaries. Beneficiaries with disabilities often report lower health status across most HOS health status measures compared to beneficiaries ages 65 and over. Analyses that use data aggregated from both older respondents and those with disabilities should be interpreted with caution, as a higher proportion of respondents with disabilities may result in lower health status estimates for some groups. Future descriptive analyses should consider stratifying results by age when response sizes permit. In addition, any predictive modeling of health status measures should control for disability status using the age category of under 65 years.

References

1. Hispanic Heritage Month 2016. Facts for Features. United States Census Bureau. Available from: <https://www.census.gov/newsroom/facts-for-features/2016/cb16-ff16.html>.
2. The Hispanic Population: 2010. 2010 Census Briefs. United States Census Bureau. Available at: <https://www.census.gov/content/dam/Census/library/publications/2011/dec/c2010br-04.pdf>.
3. Facts for Features: Hispanic Heritage Month 2017. United States Census Bureau. Available from: <https://www.census.gov/newsroom/facts-for-features/2017/hispanic-heritage.html>.
4. 65+ in the United States: 2010. United States Census Bureau. Available from: <https://www.census.gov/content/dam/Census/library/publications/2014/demo/p23-212.pdf>.
5. Haffer, S.C., and Bowen, S.E. *Measuring and Improving Health Outcomes in Medicare: The Medicare HOS Program*. Health Care Financing Review, Summer 2004. 25(4): p. 1-3. Available from: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/HealthCareFinancingReview/Downloads/04summerpg1.pdf>.
6. Office of Disease Prevention and Health Promotion. U.S. Department of Health and Human Services. *Health-Related Quality of Life and Well-Being*. Available from: <https://www.healthypeople.gov/2020/about/foundation-health-measures/Health-Related-Quality-of-Life-and-Well-Being>.
7. Ware, J.E., Kosinski, M., and Keller, S.D. *SF-36 Physical and Mental Health Summary Scales: A User's Manual*. 1994, Boston: The Health Institute.
8. Bailis, D.S., Segall, A., and Chipperfield, J.G. *Two views of self-rated general health status*. Social Science & Medicine, 2003. 56: p. 203-217.

9. Centers for Disease Control and Prevention. Health-Related Quality of Life (HRQOL) Concepts. Available at www.cdc.gov/hrqol/concept.htm. Accessed on January 24, 2018.
10. Anderson, R.J., Freedland, K.E., Clouse, R.E., and Lustman, P.J. *The prevalence of comorbid depression in adults with diabetes: a meta-analysis*. *Diabetes Care*, 2001. 24: p. 1069-1078.
11. Noël, P.H., Williams, J.W. Unützer, J., Worchel, J., Lee, S., Cornell, J., Katon, W., Harpole, L.H., and Hunkeler, E. *Depression and comorbid illness in elderly primary care patients: impact on multiple domains of health status and well-being*. *Annals of Family Medicine*, 2004. 2(6): p. 555-562.
12. Division of Nutrition, Physical Activity, and Obesity. National Center for Chronic Disease Prevention and Health Promotion. Centers for Disease Control and Prevention. Overweight and Obesity. 2017; Available from: www.cdc.gov/nccdphp/dnpa/obesity/index.htm.
13. Substance Abuse and Mental Health Administration. The DAWN Report: Drug-Related Emergency Department Visits Involving Pharmaceutical Misuse and Abuse by Older Adults. Available at: <http://archive.samhsa.gov/data/2k12/DAWN108/SR108PharmaAbuse2012.htm>.
14. Colliver JD, Compton WM, Gfroerer JC, Condon T. Projecting Drug Use Among Aging Baby Boomers in 2020. *Annals of Epidemiology*. 2006; 16(4):257-265.
15. Bogunovic O. Substance Abuse in Aging and Elderly Adults. July 12, 2012. Available at: <http://www.psychiatrictimes.com/geriatric-psychiatry/substance-abuse-aging-and-elderly-adults>.
16. Gangwisch JE, Malaspina D, Boden-Albala B, Heymsfield SB. Inadequate sleep as a risk factor for obesity: analyses of the NHANES I. *Sleep*. 2005; 28(10):1289-96.
17. Mutchler, J.E., Brallier, S. *English Language Proficiency Among Older Hispanics in the United States*. *The Gerontologist*. 1999. 39(3): p. 310-319.
18. Division of Population Health. National Center for Chronic Disease Prevention and Health Promotion. Centers for Disease Control and Prevention. *Health-Related Quality of Life (HRQOL) Concepts*. 2016; Available from: www.cdc.gov/hrqol/concept.htm.
19. Division of Nutrition, Physical Activity, and Obesity. National Center for Chronic Disease Prevention and Health Promotion. Centers for Disease Control and Prevention. *About Adult BMI*. 2015; Available from: https://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/index.html.
20. Backhaus, J., Klaus Junghanns, A.B., Riemann, D., and Hohagen, F. *Test-retest reliability and validity of the Pittsburgh Sleep Quality Index in primary insomnia*. *Journal of Psychosomatic Research*. 2002. 53(3): p. 737-740.

About the Authors

This data highlight was written by Douglas Ritenour, Jael Rodriguez, Laura Giordano, and Beth Gualtieri at the Health Services Advisory Group and Shondelle Wilson-Frederick at the CMS Office of Minority Health (OMH).

Suggested Citation

Ritenour D, Rodriguez, J, Wilson-Frederick S, et al. Understanding the Health Needs of Diverse Groups of Hispanic Medicare Beneficiaries. CMS Office of Minority Health Data Highlight, No. 14. Baltimore, MD. 2018.

Copyright Information

All material appearing in this report is in the public domain and may be reproduced or copied without permission; citation as to source, however, is appreciated.

CMS Office of Minority Health
7500 Security Blvd, MS S2-12-17
Baltimore, MD 21244
Phone: 410-786-6812
Fax: 410-786-0634
go.cms.gov/cms-omh

Appendix

Table 1: Hispanic Beneficiary Demographics, HOS Baseline Cohorts 16, 17, and 18

Demographics	Total Hispanic n (%)	Cuban n (%)	Puerto Rican n (%)	Mexican n (%)	Multi-ethnic n (%)	Other Hispanic n (%)
Age						
<65	19,395 (21.8)	469 (9.6)	6,439 (23.5)	6,136 (22.4)	1,620 (26.9)	4,731 (20.3)
65-69	23,828 (26.8)	1,197 (24.4)	7,648 (28.0)	7,102 (25.9)	1,508 (25.0)	6,373 (27.3)
70-74	19,085 (21.4)	1,085 (22.1)	5,765 (21.1)	5,815 (21.2)	1,174 (19.5)	5,246 (22.5)
75-79	12,916 (14.5)	999 (20.4)	3,717 (13.6)	4,013 (14.7)	729 (12.1)	3,458 (14.8)
80-84	7,834 (8.8)	625 (12.7)	2,144 (7.8)	2,450 (8.9)	554 (9.2)	2,061 (8.8)
85+	5,950 (6.7)	531 (10.8)	1,647 (6.0)	1,882 (6.9)	437 (7.3)	1,453 (6.2)
Gender						
Male	38,625 (43.4)	2,321 (47.3)	12,124 (44.3)	12,311 (44.9)	2,520 (41.9)	9,349 (40.1)
Female	50,383 (56.6)	2,585 (52.7)	15,236 (55.7)	15,087 (55.1)	3,502 (58.2)	13,973 (59.9)
Marital Status						
Married	41,030 (46.9)	2,441 (50.6)	12,864 (47.8)	13,123 (48.7)	2,544 (43.2)	10,058 (43.9)
Widowed	17,794 (20.3)	991 (20.5)	5,347 (19.9)	5,776 (21.4)	1,221 (20.7)	4,459 (19.5)
Divorced or Separated	19,954 (22.8)	1,066 (22.1)	6,035 (22.4)	5,366 (19.9)	1,390 (23.6)	6,097 (26.6)
Never Married	8,738 (10.0)	330 (6.8)	2,669 (9.9)	2,692 (10.0)	735 (12.5)	2,312 (10.1)
Education						
Did Not Graduate HS	43,536 (51.2)	2,130 (44.8)	13,206 (50.4)	15,448 (59.3)	2,777 (49.3)	9,975 (44.4)
High School Graduate	20,602 (24.2)	1,005 (21.2)	6,045 (23.1)	6,092 (23.4)	1,525 (27.1)	5,935 (26.4)
Some College	12,741 (15.0)	805 (17.0)	3,674 (14.0)	3,224 (12.4)	905 (16.1)	4,133 (18.4)
4 Yr College Degree +	8,204 (9.6)	810 (17.1)	3,279 (12.5)	1,276 (4.9)	429 (7.6)	2,410 (10.7)
English Proficiency						
Very Well	20,471 (34.2)	660 (19.5)	3,168 (17.5)	8,166 (43.7)	1,712 (47.3)	6,765 (42.2)
Less than very well	39,341 (65.8)	2,730 (80.5)	14,919 (82.5)	10,505 (56.3)	1,910 (52.7)	9,277 (57.8)
English Spoken at Home						
Yes	8642 (33.9)	212 (16.0)	1,029 (12.7)	3,708 (48.9)	807 (37.1)	2,886 (46.2)
No	16831 (66.1)	1,116 (84.0)	7,106 (87.4)	3,883 (51.2)	1,371 (63.0)	3,335 (53.8)
Annual Household Income						
Less than \$10,000	23,285 (28.0)	1,065 (23.4)	8,045 (31.3)	6,465 (25.4)	1,565 (28.3)	6,145 (28.2)
\$10,000-\$19,999	20,724 (24.9)	1,072 (23.6)	7,140 (27.8)	6,037 (23.7)	1,186 (21.4)	5,289 (24.2)
\$20,000-\$29,999	10,672 (12.8)	695 (15.3)	3,191 (12.4)	3,440 (13.5)	616 (11.1)	2,730 (12.5)
\$30,000-\$49,999	8,385 (10.1)	555 (12.2)	2,221 (8.6)	2,751 (10.8)	430 (7.8)	2,428 (11.1)
\$50,000 or More	4,849 (5.8)	427 (9.4)	1,000 (3.9)	1,501 (5.9)	277 (5.0)	1,644 (7.5)
Don't Know	15,170 (18.3)	732 (16.1)	4,098 (16.0)	5,282 (20.7)	1,464 (26.4)	3,594 (16.5)
Medicaid Status						
Medicaid	42,194 (47.4)	2,214 (45.1)	11,947 (43.7)	13,345 (48.7)	3,089 (51.3)	11,599 (49.8)
Non-Medicaid	46,802 (52.6)	2,692 (54.9)	15,408 (56.3)	14,052 (51.3)	2,933 (48.7)	11,717 (50.3)

SOURCE: Health Outcomes Survey Baseline Cohorts 16, 17, and 18 (n=756,253). Medicare beneficiaries are randomly surveyed from each participating Medicare Advantage Organization. Respondents include both seniors (≥ 65 years old) and beneficiaries with disabilities (< 65 years old).

NOTE: Due to rounding, sum of cells may not equal 100%.

Total includes all beneficiaries who returned a baseline survey and had a physical component summary (PCS) score and/or mental component summary (MCS) score. Beneficiaries who responded in multiple cohorts are counted in the first cohort in which they appear for all table analyses.

Beneficiaries less than 65 years old are classified as disabled.

English language is measured by two different questions across this 3 cohort sample: "How well do you speak English (very well, well, not well, or not at all)?" for Cohort 16 and Cohort 17 respondents, and "What language do you mainly speak at home (English, Spanish, Chinese, some other language)?" for Cohort 18.