

Comparing Puerto Rican's Health Status, Access to Care, and Satisfaction with Care to Their Mainland Counterparts Prior to Hurricane Maria

In September 2017, Hurricane Maria, a Category 4 storm, made landfall in Puerto Rico, just weeks after Hurricane Irma. Hurricane Maria cut off 100% of the island's electricity and caused more than \$90 billion in damages.ⁱ Therefore, in an effort to understand the Medicare beneficiaries' health prior to Hurricane Maria, the Centers for Medicare & Medicaid Services' Office of Minority Health utilized survey data collected prior to the hurricane to analyze how health status, access to care, and satisfaction with care differed between Medicare beneficiaries residing in Puerto Rico and the U.S. mainland. This information can provide additional context for the challenges that have since emerged or were exacerbated by Hurricane Maria.

The study looked at three different population groups – Puerto Rico-dwelling Puerto Ricans (Puerto Ricans) (11.1%), mainland-dwelling Puerto Ricans (10.4%), and other mainland-dwelling Hispanics (78.4%).ⁱ The study also focused on beneficiaries continuously enrolled in Medicare in 2015 (population with no gap in Medicare coverage during the calendar year 2015).ⁱⁱ Respondents who identified as Puerto Rican residing in Puerto Rico were, on average, 70 years of age, with the majority being female, married, and having at least a high school diploma.²

To establish baseline information on the pre-hurricane, self-reported health status of Puerto Ricans for the study, data from the 2015 Medicare Current Beneficiary Survey (MCBS), the most recent year of available data from one of the largest ongoing health surveys of Medicare beneficiaries, were used. Specifically, 2015 data from the MCBS were examined to understand how Puerto Rican beneficiaries were doing on indicators reflecting health status, access to care, receipt of recommended preventive services, satisfaction with care, and health concerns compared to both mainland-dwelling Puerto Ricans and other mainland-dwelling Hispanics.

Overall, this study found that Puerto Rican beneficiaries reported similar health status ratings as mainland-dwelling groups. They also reported similar levels of satisfaction with care, such as satisfaction with medical care, care from specialists, the information they received about their diagnosis, and their doctor's concern about their overall health. Puerto Rican beneficiaries were also similar to mainland-dwelling Puerto Rican and Hispanic groups in their knowledge of and utilization of certain preventive services, such as having a mammogram or blood pressure screening, knowing of or ever having had a colonoscopy or sigmoidoscopy, knowing of fecal occult

ⁱAll analyses were weighted using the MCBS survey weights, to account for survey design (continuously enrolled, cross-sectional sample from 2015). Beneficiary characteristics were summarized using weighted univariate descriptive statistics, including weighted means and standard errors for continuous variables (e.g., age) and weighted percentages for categorical variables.

²Note that this study is subject to important limitations. Despite weighting to account for sampling approaches used in the MCBS, the sample size was small, which reduced the statistical power to detect smaller effect sizes. In addition, the MCBS relies on self-reported survey data, which are subject to the potential reporting and recall bias, especially as it may relate to how racial and ethnic groups may differentially report information.

blood test, or knowing that Medicare pays for colorectal cancer screening. On the contrary, there were a few ratings where Puerto Rican beneficiaries differ from the mainland-dwelling groups. Puerto Rican beneficiaries reported a lower rating when it comes to having a usual source of care, had a flu shot for the last winter, and had pneumonia shot, for those age 65 and older, compared to the mainland-dwelling groups. See Table 1 and 2 below for the detail on the study findings.

As this study is one of the first known attempts to provide a snapshot of Puerto Ricans' reported health status, access to care, and satisfaction with care compared to their mainland counterparts prior to Hurricane Maria, it may be helpful to consider this baseline data when assessing future health outcomes of Puerto Ricans. Many Puerto Ricans are still dealing with the damage and disruption caused by Hurricane Maria. Thousands of residents moved to the U.S. mainland.ⁱⁱⁱ Months after Hurricane Maria, a significant number of the island remained without power.^{iv} Additionally, recently Puerto Rico officials reported that the death toll from Hurricane Maria was 2,975 people, a significant increase over the figure of 64 people originally reported in December 2017.^v With many Puerto Ricans still recovering from the impact of Hurricane Maria, further assessment of the health status, access to care, and satisfaction with care of Puerto Ricans in the coming years may be warranted to track and determine the long term impact.

Table 1: Self-Reported Health Status, Access to Care and Recommended Preventive Services by Puerto Rican and Hispanic Ethnicity: 2015 Medicare Current Beneficiary Survey Continuously Enrolled Community-Based Sample (weighted percentages shown)³

	Puerto Rico-dwelling Puerto Ricans	Mainland-dwelling Puerto Ricans	Mainland-dwelling non-Puerto Rican Hispanics	p-value ^a
Health Status				
Rating of health compared to others your age				<.001
Excellent	13.1	8.9	13.6	
Very good	12.3	11.3	17.6	
Good	27.8	44.8	28.8	
Fair	41.5	14.0	29.5	
Poor	5.3	21.0	10.5	
Access to Care				
Have usual source of care	66.8	93.9	88.7	<.001
Place usually go for medical care^b				<.001
Doctor's office or group practice	81.8	69.1	68.0	
Doctor's clinic	9.2	11.0	13.9	
Hospital	4.4	13.5	1.7	
Other ^c	4.6	6.3	16.5	
Recommended Preventive Services				
Flu shot for last winter	36.9	63.8	75.5	<.001
Ever had pneumonia shot (age 65 years and older)	39.8	81.8	71.8	<.001
Colorectal Cancer Screening (age 50-74 years)				<.001
Heard of colon cancer before today	94.3	99.0	84.9	0.01
Ever given home fecal occult blood test (FOBT)	68.8	35.8	52.0	0.57
If never given FOBT, heard of FOBT	50.5	41.2	54.8	
Mammogram/breast x-ray in past year (women, age 50-74)	68.3	69.6	58.3	0.36

^a p-value tests for any differences among the three groups. If the overall p-value is statistically significant at <0.01, post-hoc pairwise comparisons among those three groups were examined. Statistically significant differences between groups are indicated by green and yellow colored cells (green is significantly higher than yellow). If two cells are the same color (both yellow or both green), they are not significantly different from each other.

^b Applies only if the respondent has a usual source of care. p-value compares doctor's office vs. all other groups.

^c Other includes health maintenance organization (HMO), neighborhood or family health center, rural health clinic, company clinic, other clinic, walk-in urgent care center, at home, Veterans Administration (VA) facility, mental health center, other.

³Overall, there were 184 Puerto Rico-dwelling Puerto Rican respondents representing 507,430 beneficiaries, 121 mainland-dwelling Puerto Rican respondents representing 474,167 beneficiaries, and 874 mainland dwelling non-Puerto Rican Hispanic respondents representing 3,562,041 beneficiaries.

Table 2. Satisfaction with Care and Health Concerns by Puerto Rican and Hispanic Ethnicity: 2015 Medicare Current Beneficiary Survey Continuously Enrolled Community-Based Sample (weighted percentages shown)³

	Puerto Rico-dwelling Puerto Ricans	Mainland-dwelling Puerto Ricans	Mainland-dwelling non-Puerto Rican Hispanics	p-value ^a
Satisfaction with care during the past year				
Quality of medical care				0.68
Very satisfied	37.5	38.0	43.1	
Satisfied	52.2	49.5	48.7	
Dissatisfied / Very Dissatisfied	3.2	8.3	5.3	
No experience	7.1	4.2	4.7	
Ease to get to the doctor from home^e				<.001
Very satisfied	30.7	25.1	28.1	
Satisfied	54.5	50.5	63.2	
Dissatisfied / Very Dissatisfied	9.0	20.3	5.5	
No experience	5.8	4.1	3.2	
Doctor's concern with your overall health				.82
Very satisfied	29.9	28.6	29.1	
Satisfied	59.0	57.9	61.6	<.001
Dissatisfied / Very Dissatisfied	5.2	8.1	4.8	<.001
No experience	5.9	5.4	4.5	0.57
Health Concerns				
Worry about health more than others your age	75.6	58.3	51.3	<.001
Do almost anything to avoid going to the doctor	62.8	41.9	39.6	<.001
When you are sick, try keeping sickness to yourself	38.1	54.2	37.7	0.007
Usually go to the doctor as soon as you feel bad	62.2	65.5	57.4	0.44

^a p-value tests for any differences among the three groups. If the overall p-value is statistically significant at <0.01, post-hoc pairwise comparisons among those three groups were examined. Statistically significant differences between groups are indicated by green and yellow colored cells (green is significantly higher than yellow). If two cells are the same color (both yellow or both green), they are not significantly different from each other.

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