2009 NEW JERSEY FAMILY HEALTH SURVEY

RUTGERS
Center for State Health Policy

Facts & Findings June 2011
Emergency Department Use by New Jersey Residents in 2009

Key findings

- *Patients covered by Medicare or Medicaid use the emergency department (ED) much more frequently than the uninsured, who are similar to the privately insured in their ED use.*
- *Health status is a major driver of ED use, especially for patients making multiple ED visits in a year.*
- *Non-citizens use the ED much less than U.S.-born residents. ED use is especially low among recently arriving immigrants.*

For many years, emergency department (ED) volume has been growing in New Jersey (NJ) and across the nation.[1,2] This growth is likely to continue, and may accelerate, as federal health reform expands the number of insured patients seeking services from primary care providers already straining to meet current demands for care.[2] This issue brief uses the New Jersey Family Health Survey (NJFHS) to document the frequency of ED use, overall and by subgroups of NJ residents in 2009 (Information about the NJFHS is contained in the methods, back page.)

Residents covered by Medicaid or the Children's Health Insurance Program (NJ FamilyCare) stand out for their frequent use of the ED (Figure 1). In particular, Medicaid/NJ FamilyCare patients are at least three times as likely as any other coverage group to have 3 or more visits over the course of a year. Medicare patients are also relatively heavy ED users. Uninsured residents are similar those with employer/private coverage in their volume of ED use.

Health status is a major driver of ED utilization (Figure 2). Those with general health reported as fair/poor are

Figure 1 | **Distribution of ED Visits in New Jersey – by Insurance Status**

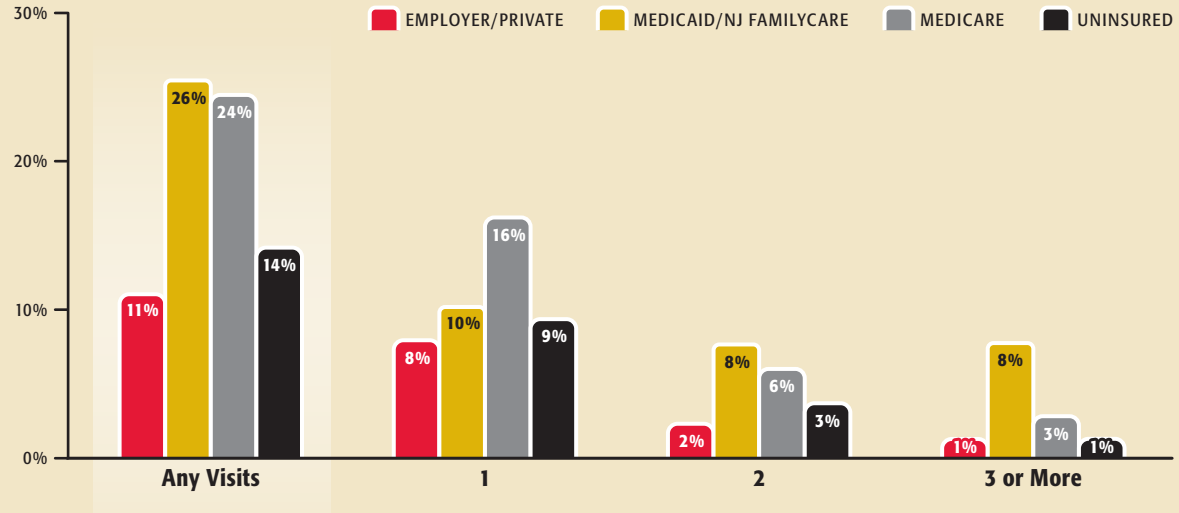

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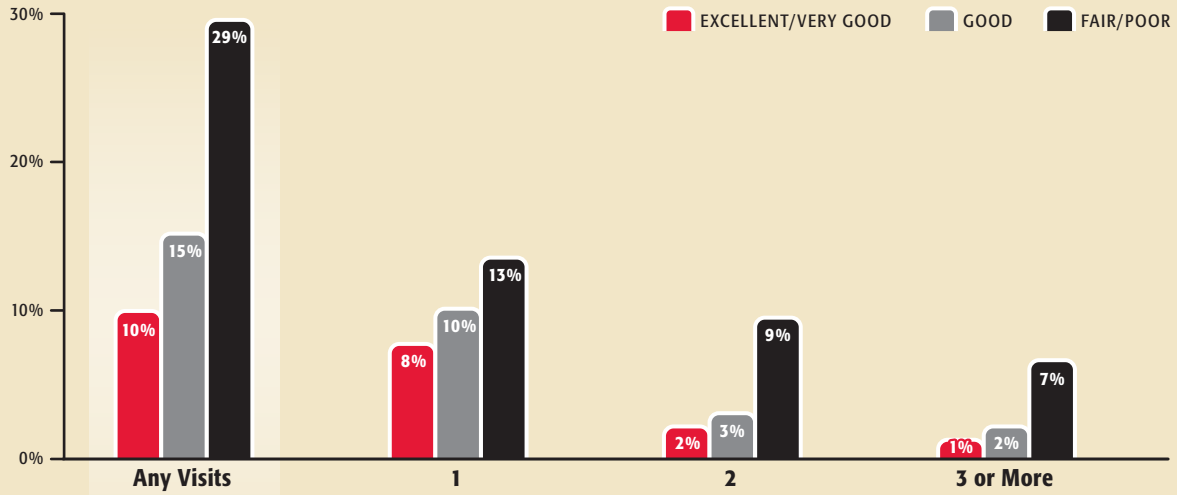
Figure 2 | **Distribution of ED Visits in New Jersey – by Perceived Health Status**



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approximately twice as likely as those in good health and three times as likely as those in excellent/very good health to have any ED visits. The disparity in ED use by health status becomes progressively larger for comparisons made at higher levels of ED volume (i.e., from 1 to 2 to 3 or more ED visits).

American born citizens use the ED more frequently than immigrants (Figure 3). Immigrants who are not U.S. citizens and living in the United States for less than five years use the ED less frequently than other NJ residents.

Additionally, ED use is more frequent among residents ages 65 and over, those just above the poverty level, non-Hispanic blacks, and Hispanics (Table). ED use does not vary significantly by gender or usual source of care.

Although many patients with non-urgent conditions could be diverted from the ED to other settings, the heaviest ED users are generally vulnerable patients with substantial health needs. The idea that immigrants and the uninsured are using the ED at an excessive rate is not supported by the data.

Figure 3 | **Distribution of ED Visits in New Jersey – by Immigration Status**

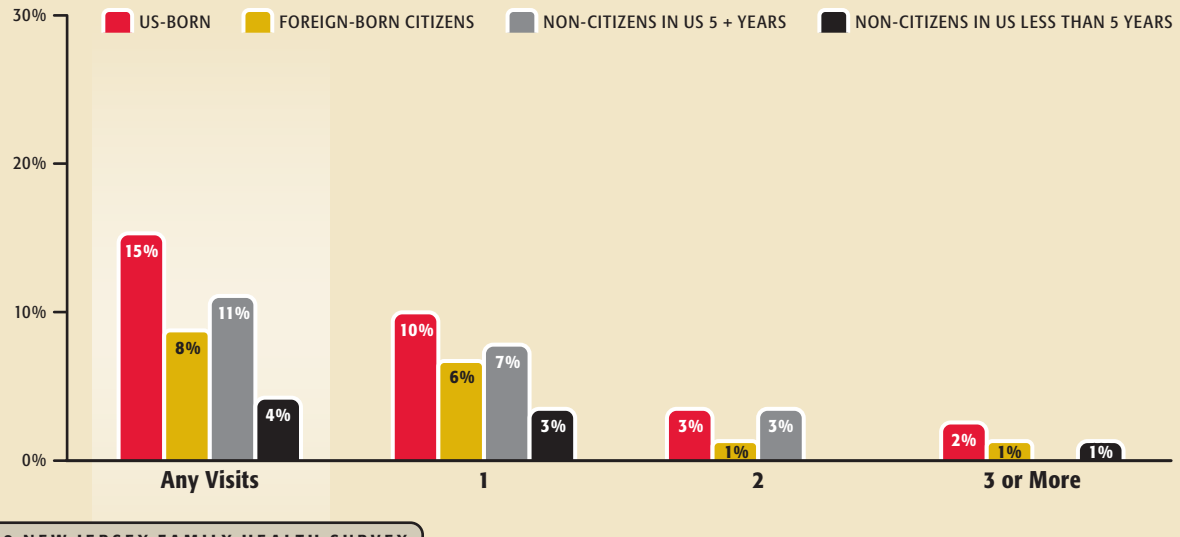

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Table | **Distribution of ED Visits (row percentages)**

	Unweighted number	Weighted percentage reporting specified number of ED visits (95% Confidence Interval)			
		None	1	2	3 or more
Overall	**7,299**	**86.4 (85.0 – 87.8)**	**8.9 (7.8 – 10.0)**	**3.0 (2.3 – 3.6)**	**1.8 (1.2 – 2.3)**
Age[a]					
0-18	1,599	85.4 (82.5 - 87.9)	9.9 (7.8 - 12.3)	2.8 (1.8 - 4.2)	1.9 (1.0 - 3.7)
19-64	4,947	87.9 (86.3 - 89.5)	7.8 (6.6 - 9.1)	2.9 (2.2 - 3.8)	1.4 (0.9 - 2.2)
65+	753	80.7 (75.6 - 84.8)	12.6 (9.2 - 17.1)	3.8 (2.1 - 6.5)	3.0 (1.6 - 5.6)
Gender					
Male	3,509	87.4 (85.6 – 89.1)	8.3 (6.9 – 9.7)	2.6 (1.8 – 3.5)	1.7 (1.0 – 2.5)
Female	3,790	85.5 (83.6 – 87.3)	9.5 (8.0 – 11.0)	3.2 (2.3 – 4.2)	1.8 (1.0 – 2.5)
Income as percentage of FPL[1,a]					
0-100	515	80.5 (73.6 - 86.0)	8.4 (5.5 - 12.7)	8.6 (5.2 - 14.0)	2.4 (1.1 - 5.4)
101-200	999	77.7 (71.3 - 83.1)	12.4 (8.9 - 16.9)	5.4 (3.3 - 8.6)	4.5 (2.4 - 8.4)
201-350	1334	85.4 (82.1 - 88.2)	9.1 (7.0 - 11.7)	2.7 (1.8 - 4.1)	2.9 (1.8 - 4.6)
> 350	4451	89.3 (87.8 - 90.7)	8.2 (7.0 - 9.6)	1.8 (1.3 - 2.5)	0.7 (0.4 - 1.2)
Insurance[a]					
Employer/Private	5092	89.3 (87.8 - 90.6)	7.7 (6.6 - 9.0)	2.1 (1.5 - 2.8)	1.0 (0.6 - 1.5)
Medicaid/CHIP	504	73.7 (65.2 - 80.8)	10.1 (6.7 - 15.0)	8.1 (4.9 - 13.1)	8.1 (4.6 - 14.1)
Medicare	752	79.7 (74.6 - 84.0)	14.0 (10.4 - 18.6)	3.7 (2.1 - 6.4)	2.6 (1.4 - 4.9)
Uninsured	914	86.3 (82.4 - 89.4)	9.0 (6.5 - 12.3)	3.4 (2.0 - 5.7)	1.3 (0.6 - 3.1)
Race/Ethnicity[a]					
White[2]	5,007	86.5 (84.8 – 88.1)	9.4 (8.1 – 10.8)	2.4 (1.7 – 3.1)	1.7 (1.0 – 2.4)
Black[2]	890	82.3 (77.9 – 86.7)	11.0 (7.3 – 14.6)	4.5 (2.4 – 6.7)	2.2 (0.7 – 3.7)
Hispanic	966	84.9 (80.5 – 89.2)	7.3 (5.0 – 9.7)	5.3 (3.1 – 7.6)	2.5 (0.7 – 4.3)
Other	436	94.1 (91.1 – 97.0)	5.1 (2.3 – 7.8)	0.4 (0.0 – 0.8)	0.5 (0.0 – 1.2)
Immigration Status[a]					
US Born Citizen	6,346	85.1 (83.5 – 86.6)	9.6 (8.4 – 10.8)	3.3 (2.5 – 4.0)	2.1 (1.4 – 2.8)
Foreign-Born US Citizen	559	91.6 (88.4 – 94.9)	6.3 (3.4 – 9.1)	1.4 (0.0 – 2.8)	0.7 (0.0 – 1.7)
Non-Citizen in U.S. < 5 yrs	86	96.2 (92.0 – 100.0)	3.0 (0.0 – 7.1)	0.3 (0.0 – 0.7)	0.5 (0.0 – 1.4)
Non-Citizens in U.S. ≥ 5 yrs	240	89.3 (83.4 – 95.1)	7.4 (3.5 – 11.4)	3.1 (0.3 – 5.8)	0.2 (0.0 – 0.6)
General Health[a]					
Excellent/Very Good	4,855	90.3 (88.9 – 91.6)	7.6 (6.4 – 8.7)	1.6 (1.0 – 2.1)	0.6 (0.1 – 1.0)
Good	1,619	85.0 (82.2 – 87.9)	9.8 (7.4 – 12.2)	3.0 (1.7 – 4.2)	2.2 (1.1 – 3.3)
Fair/Poor	810	70.6 (65.6 – 75.7)	13.4 (9.8 – 17.1)	9.4 (6.2 – 12.5)	6.6 (3.9 – 9.3)
Usual Source of Care					
No Usual Source[3]	588	89.9 (86.4 – 93.4)	7.4 (4.3 – 10.4)	1.8 (0.2 – 3.4)	0.9 (0.2 – 1.7)
Doctors Office	5,522	86.0 (84.4 – 87.5)	9.3 (8.0 – 10.6)	3.0 (2.3 – 3.8)	1.7 (1.0 – 2.4)
Other place	1,128	85.7 (82.0 – 89.3)	8.5 (5.9 – 11.0)	3.4 (1.6 – 5.1)	2.5 (0.9 – 4.2)

Source: New Jersey Family Health Survey
[1] Federal Poverty Level
[2] Non-Hispanic
[3] Includes ED as the usual source of care.
[a] Difference statistically significant at $p<0.05$ according to a Chi-square test.

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References

[1] Derek DeLia. *Hospital Capacity, Patient Flow, and Emergency Department Use in New Jersey*. Report to the New Jersey Department of Health and Senior Services, September 2007.

[2] Derek DeLia & Joel Cantor. "Emergency Department Utilization and Capacity." *Research Synthesis Report* No.17. Robert Wood Johnson Foundation: Princeton, NJ. July, 2009.

Other Resources

Derek DeLia & Elizabeth Wood. "The Dwindling Supply of Empty Beds: Implications for Hospital Surge Capacity." *Health Affairs* 27(6): 1688-1694, 2008.

Derek DeLia. *Potentially Avoidable Use of Hospital Emergency Departments in New Jersey*. Report to the New Jersey Department of Health and Senior Services, July 2006.

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CSHP's Facts & Findings

Facts and Findings from Rutgers Center for State Health Policy highlight findings from major research initiatives at the Center, including the New Jersey Family Health Survey. Previous *Facts and Findings*, along with other publications, are available at www.cshp.rutgers.edu.

Methods

The 2009 New Jersey Family Health Survey (NJFHS) was designed to provide population-based estimates of health care coverage, access, use, and other health topics important for New Jersey policy formulation and evaluation in the coming years. It was funded by the Robert Wood Johnson Foundation and designed and conducted by the Rutgers Center for State Health Policy (CSHP). The survey, conducted between November 2008 and November 2009, was a random-digit-dialed (RDD) telephone survey of 2,100 families with landlines and 400 families relying on cell phones residing in New Jersey. It collected information about a total of 7,336 individuals and had an overall response rate of 45.4% (61.7% for landlines and 26.0% for cell phones). The adult who was most knowledgeable about the health and health care needs of the family was interviewed.

Further information on the NJFHS, including a comprehensive methods report and the full text of the survey questionnaire, can be found on the CSHP website at http://www.cshp.rutgers.edu/Downloads/8610.pdf and http://www.cshp.rutgers.edu/Downloads/8620.pdf.

All statistical analyses account for the NJFHS's complex survey design, which includes weighting and stratification. Differences in ED use by population subgroups (e.g., age, health status) were assessed using Chi-square tests for complex survey data.

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