Demographic and Attitudinal Predictors of Safety Net and Emergency Room Utilization: A Comparison between New Brunswick and New Jersey Adult Residents

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Abstract

Purpose: To compare the demographic and attitudinal factors that predict safety net and emergency room utilization for adults age 19-64 in New Jersey statewide versus the town of New Brunswick, NJ.

Methods: Separate statistical analyses for New Brunswick using the Healthier New Brunswick Community Survey and for New Jersey using the New Jersey Family Health Survey, followed by qualitative comparison. Identical items were used on both survey questionnaires.

Conclusions: There are various differences between safety net and ER users and even more differences between NJ and NB users of both types of facilities. Future research should include an examination of health attitudes prominent in the homelands of immigrants and how they translate in the United States. In addition, the same analysis in other major cities in New Jersey (e.g., Newark) to get a more detailed picture of differences across New Jersey.

Context

The safety net consists of community, migrant, and school-based health centers, hospital outpatient clinics, the health center for the homeless programs, public health housing program, community-based clinics, and teaching hospitals (IOM, 2004).

About 15% of New Jersey population is uninsured (FamiliesUSA, 2005).

One study found only eight percent of uninsured people who were aware of safety-net providers in their community identified a hospital emergency room as a safety-net provider (May, Cunningham, & Hadley 2004).

Emergency department utilization in New Jersey exceeds the national average and visits in the U.S. reached nearly 110 million in 2004 (McCaig & Nawar, 2006).

More and more people are using both the safety net and the ER, and it is necessary to have a clear understanding of not only how many use these services, but who these people are.

Dataset for NJ

- New Jersey Family Health Survey (NJFHS)

- Non-telephone coverage was estimated by asking respondents about their phone service interruptions in the past year

- Conducted in English and Spanish

- $15 Incentive

- Response Rate of 59.3%

Sample

- Survey population consisted of 2,265 households in NJ; 6,466 individuals

- Low income families (less than 200% of FPL) were oversampled

- Questions asked to one adult in the household who claimed to be the most knowledgeable about health and health care needs of the family

- Study sample consisted of 3286 adults (respondent and spouse, if any)

Dataset for NB

- Healthier New Brunswick Community survey (HNBCS)

- 23 households without telephones were given cell phones to carry out interview (4%)

- Conducted in English and Spanish

- Response Rate of 52.3%

Sample

- Survey population consisted of 525 households in NB;
1,572 individuals

-Questions asked to one adult in the household who claimed to be the most knowledgeable
about the health and health care needs of the family

- The study sample consisted of 814 adults (respondent and spouse, if any)

Health Attitudes

1. Having my medical needs taken care of at a public or free clinic is just fine with me.

2. Most doctors will treat you even if you can't afford to pay the full amount.

3. If you are healthy, having health insurance is still a necessity.

4. Doctors and hospitals make too many mistakes.

5. If you wait long enough, most health problems go away by themselves.

6. I worry a lot about my health.

7. If I take the right actions, I can stay healthy.

8. Health professionals control my health.

9. Most things that affect my health happen to me by chance.

10. For the most part, I only go to the doctor when a health problem gets bad.

11. Even when I am sick, I prefer not to take medicines.

12. I am a lot more likely to take risks than the average person.

13. I have problems finding the time to get to the doctor.

14. Families should help each other pay for health insurance in financially tight times.

Analytical Strategy

Bivariate Analysis

Bivariate associations between each of the independent variables and usual source of care were conducted using chi-square statistics for all categorical predictors and one way ANOVA for the continuous variables

Multivariate Analysis

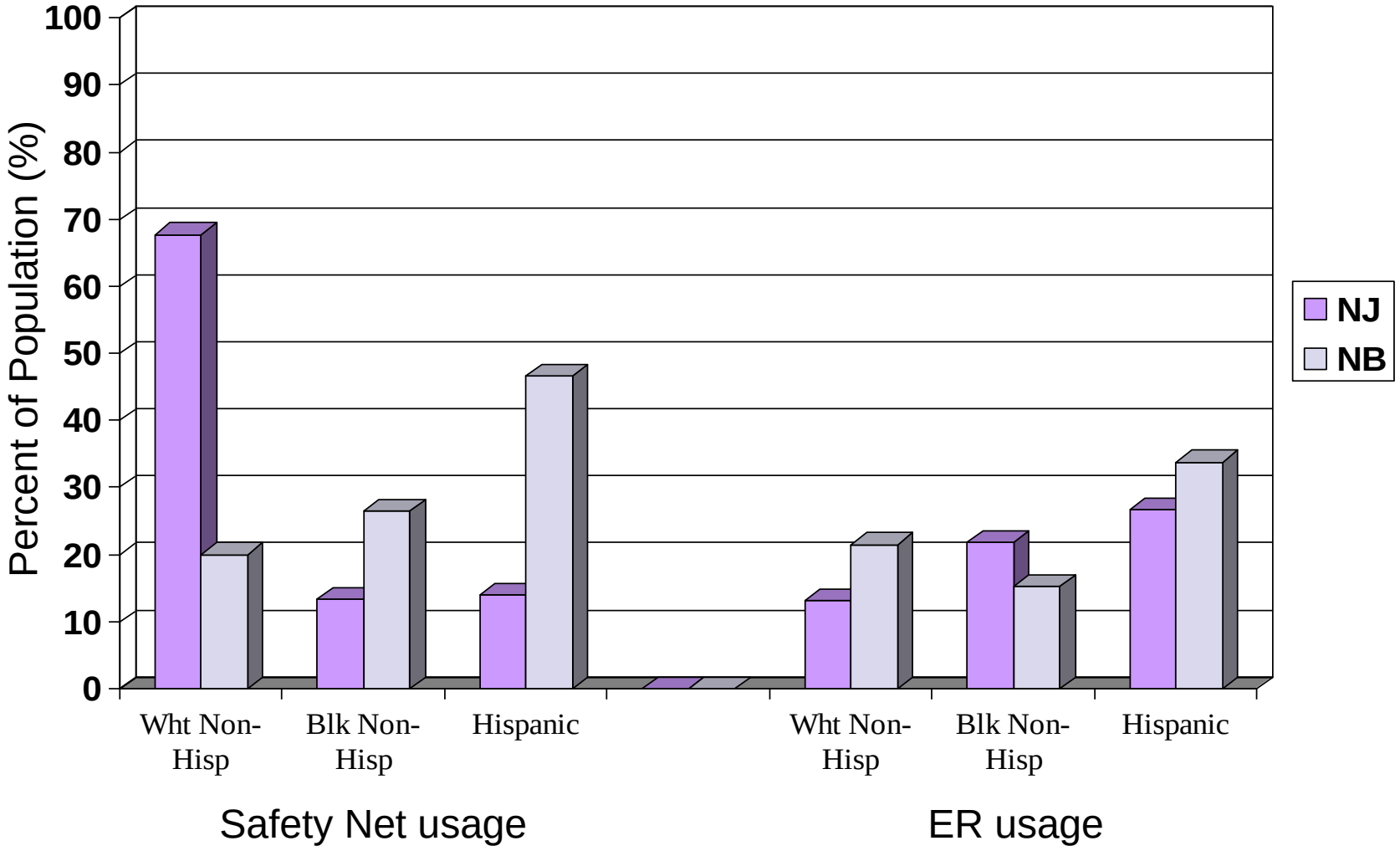
Multinomial Regression

3 models:

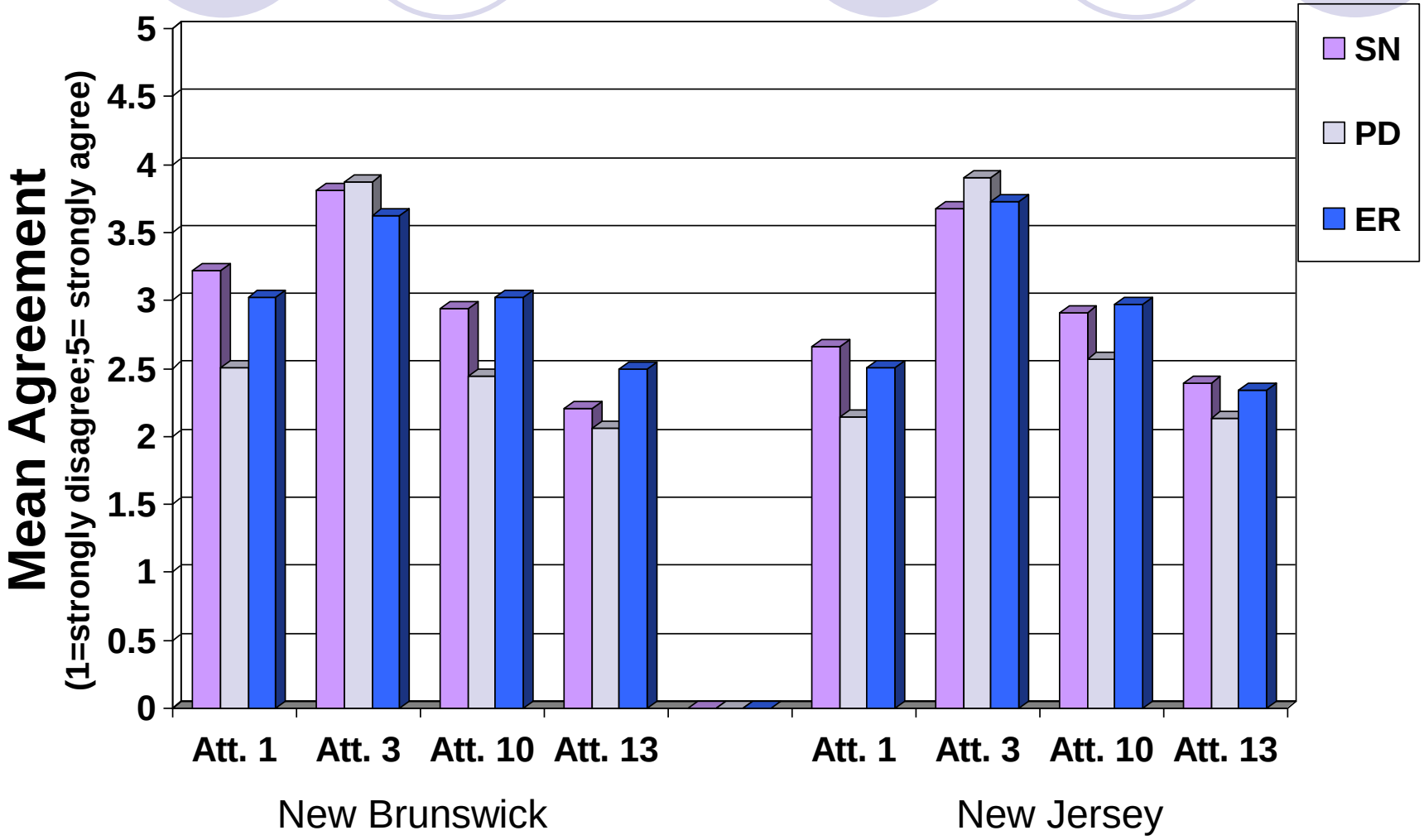
Demographics→ Controls→ Health Attitudes

DV: Usual source of care (private doctor, safety net, ER)

Safety Net and ER Usage by Race/Ethnicity of NB and NJ Adult Residents



Usual Source of Care by Health Attitudes of NB and NJ Adult Residents



** See Health Attitudes Slide to determine attitudes

Multinomial Regression for NB

Negelkerke R^2=.539; * p<.05;† .051≤ p ≥.059

Predictor	SN	ER	Predictor	SN	ER
Age	.986	.971	Health Status	.782	1.219
Blk Non-Hisp	1.097	1.158	Delay Behavior	2.138	2.858
Hispanic	.889	1.068	Attitude 2	1.343*	1.125
Non-cit < 5yrs	3.301	4.294*	Attitude 3	.783	.421*
Uninsured	43.398*	11.440*	Attitude 6	.886	1.730*
Public Insurance	28.134*	1.698	Attitude 9	.658*	.986
0-100% Federal Poverty Level (FPL)	3.381	.201*	Attitude 10	1.353*	1.931*
101-200% FPL	4.584	.858	Attitude 13	.987	1.291*
201-350% FPL	4.986*	.666			

Multinomial Regression for NJ

Negelkerke R^2=.234; * p<.05;† .051≤ p ≥.059

Factor	SN	ER	Factor	SN	ER
Age	.976*	.987*	Health Status	.788*	1.024
Blk Non-Hisp	1.536	1.399†	Delay Behavior	1.519†	1.165
Hispanic	1.909*	1.189	Attitude 2	.938	.831*
Non-cit < 5yrs	3.466*	2668*	Attitude 3	.788	.820†
Uninsured	2.627*	5.286*	Attitude 6	.935	.928
Public Insurance	3.010*	1.787*	Attitude 9	1.049	.981
0-100% FPL	2.094†	1.568	Attitude 10	1.079	1.139*
101-200% FPL	2.317*	1.346	Attitude 13	1.098	1.011
201-350% FPL	1.199	1.046			

Key Findings for Safety Net Usage

New Jersey

- Younger
- Hispanic
- Non-Citizen less than 5 yrs
- Tend to be poor
- Worse self-assessed health status
- Tend to have delayed care seeking behavior

New Brunswick

- Uninsured or public insurance
- 201-350% FPL

Endorse:

- Most docs will treat you without pay
- Things that affect my health don't happen by chance
- Only go to the doc when problem gets bad

Key Findings for ER Usage

New Jersey

- Younger
- Tend to be black
- Non-Citizen less than 5 yrs

Endorse:

- Most docs won't treat without pay
- Health insurance may not be a necessity
- Only go to the doc when problem gets bad

New Brunswick

- Younger
- Non-Citizen less than 5 yrs
- Uninsured
- Poor

Endorse:

- Health insurance may not be necessary
- I worry a lot about my health
- Only go to the doc when problem gets bad
- Trouble finding time to go to the doc

Implications

ER usage

- Younger adults may not feel there is a necessity for health insurance because most can't afford insurance and are generally healthy until a problem gets bad. (NJ)
- Immigrants in the country for less than 5 years may not be eligible for public insurance and therefore use the ER. (NB)
- Also, possibly because of their jobs (e.g., low paying, low on "totem pole"), it may be difficult to get time off to go the doctor. (NB)

Safety Net usage

- A clear economics-health connection was seen among adult residents in NJ: poor, delayed care-seeking behavior, and worse health status.
- Race/ethnicity only played a role in NJ and not NB possibly because NB accommodates the large Hispanic population well with many clinics and translation programs
- Those with a moderate income level (201-350%) may use the safety net because they are not eligible for public insurance or since NB has many clinics, it may just be convenient.
- Still in NB, people only use the safety net when a problem gets bad. Perhaps that is due to a more cultural or adaptive attitude; in their home country, maybe people only go the hospital (or clinic) when problems are bad and everything else they deal with at home.

Strengths

New Jersey

- Very good response rate of almost sixty percent.

- The design of the survey allowed for large amount of detail

- Oversampled poor population

Limitations

- Using the respondents' responses as a proxy for the spouse

(However, the most knowledgeable person about the health and health care needs.)

New Brunswick

- Interviews of those with and without phones were done therefore poor people were included in the sample.

- The study used a large representative sample that was racially and ethnically diverse and included a large amount of non-citizens.

-Cross-sectional study

- Comparative data on other cities was not used. Therefore, it may be hard to generalize the findings to other cities that are not like New Brunswick (Data is available for urban NJ from the NJFHS for future analysis)