

# The Impact of Health Attitudes on Health-Seeking Behavior and Health

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## Introduction

Improving the overall health of the nation is an important public health goal in the United States. With the emergence of national health initiatives such as *Healthy People 2000: National Health Promotion and Disease Prevention Objectives* and *Healthy People 2010*, emphasis has been placed on increasing the quality and years of life and eliminating health disparities in the U.S.<sup>1</sup> Particularly, increasing the use of preventive health care services to decrease the incidence of cancer and other chronic conditions is a key objective set forth by the federal government.<sup>2</sup>

To date, it is believed that preventive health services such as periodic cancer screenings can lead to early detection and treatment of disease and better health outcomes. However, not all Americans are utilizing these services.

### Key Health-Seeking Behavior Patterns

- In 2003, 84.9% of Americans ages 45 and older reported having had a blood cholesterol screening during the preceding five years.<sup>3</sup>
- Also in 2003, 65.5% of U.S. adults ages 65 years and older and 55.6% of U.S. adults ages 65 years and older reported receiving an influenza and pneumococcal vaccination, respectively.<sup>4</sup>
- In 2000, 42.5% of U.S. adults ages 50 and older reported having undergone a colorectal screening test such as a sigmoidoscopy or colonoscopy in the last 10 years or had a fecal occult blood test (FOBT) within the preceding year.<sup>5</sup>
- 85% of U.S. women ages 50-69 met the recommended guidelines for Pap tests, and only 82% of U.S. women ages 50-69 met the recommended guidelines for mammogram screening, during 2002-2003.<sup>6</sup>

Research has been conducted to help us understand why some individuals are not using available preventive health services. It has been shown that factors such as the absence of physician recommendations and the lack of health insurance can affect the use of preventive health services.<sup>7,8</sup> Additionally, an individual's attitude towards health and health care may affect their decision to seek care. For instance, prior research has found that fatalistic attitudes toward cancer are associated with mammogram and Pap smear non-adherence.<sup>9</sup> Moreover, there may be different health personality profiles based on individuals' attitudes towards health insurance and health care, and these profiles may indicate those who are more or less willing to purchase health insurance.<sup>10</sup>

Despite these findings, large, nationally representative surveys such as the National Survey of America's Families (NSAF) and the National Health and Nutrition Examination Survey (NHANES) include few, if any, items on attitudes and perceptions regarding health care utilization, the health care system, and health care professionals. Thus, this 2001 representative sample of New Jersey families explores the relationship between health attitudes and preventive health behaviors. The main goals of this study are to understand the impact of health attitudes and perceptions on preventive health-seeking behavior, to compare the impact of health attitudes on utilization of preventive health services, physician services, and prescription drugs, and to identify distinct health personality profiles among the NJFHS respondents.

### The New Jersey Family Health Survey (NJFHS)

The NJFHS was conducted in the summer of 2001 through the spring of 2002 by the Rutgers Center for State Health Policy and was funded by the Robert Wood

Johnson Foundation. The survey was a representative, random-digit-dialed telephone survey of 2,265 families residing in the state of New Jersey covering 6,466 individuals, with a response rate of 59.3%. The adult most knowledgeable about the health and health care needs of the family was interviewed. The general goals of the survey were to provide precise population-based estimates of health care coverage, access, health care utilization, and other health topics important for policy formulation and evaluation in New Jersey, and to provide baseline data on important health care indicators.

The Health Personality Profiles (HPP) were created based on the respondent's information on 14 distinct health attitudes. The health attitudes were answered on a Likert scale of 1-4 (1 = strongly disagree and 4 = strongly agree).

## Results

Cluster analysis (M Plus<sup>11,12</sup>) revealed four distinct HPP represented in the sample of NJFHS respondents: the Safety Net Users (3%), the Medically Disadvantaged (5%), the Medically Prudent (51%), and the Medical Embracers (41%). The name of each HPP was determined based on each groups' responses to the 14 health attitudes.

### New Jersey Family Health Survey Health Attitudes

- "Having my medical needs taken care of at a public or free clinic is fine with me."
- "Most doctors will treat you even if you can't afford to pay the full amount."
- "If you are healthy, having health insurance is still a necessity."
- "Doctors and hospitals make too many mistakes."
- "If you wait long enough, most health problems go away by themselves."
- "I worry a lot about my health."
- "If I take the right actions, I can stay healthy."
- "Health professionals control my health."
- "Most things that affect my health happen to me by chance."
- "For the most part, I only go to the doctor when a health problem gets bad."
- "Even when I am sick, I prefer not to take medications."
- "I am a lot more likely to take risks than the average person."
- "I have problems finding time to get to the doctor."
- "Families should help each other pay for health insurance in financially tight times."

**Table 1: 9 Measures Used to Calculate Total Preventive Compliance Score**

| Type of Preventive Health Service | Age/Gender Appropriate Preventive Measure   |
|-----------------------------------|---|
| 1. Preventive Care Visits         | # of preventive care visits in the last 12 months   |
| 2. Dental Visits                  | # of dental visits in the last 12 months  |
| 3. Pap Smear                      | Having received a Pap smear in the last 12 months if female and 20 years or older   |
| 4. Mammogram                      | Having received a mammogram within the past year, within the past 2 years, within the past 3 years, within the past 5 years, or within the past 5 or more years if female and 40 years or older |
| 5. Prostate Exam                  | Having ever received a prostate exam if male and 50 years or older  |
| 6. Colorectal Cancer Screening    | Having ever been screened for colorectal cancer (any test) if 50 or older   |
| 7. Cholesterol Screening          | Having ever received a blood test for cholesterol if male and 35 or older or if female and 45 or older  |
| 8. Flu Shot                       | Having received a flu shot in the last 12 months if 50 or older   |
| 9. Pneumonia Vaccination          | Having ever received a pneumonia vaccination if 65 or older   |

Note: All preventive measures with the exception of dental visits and mammogram adherence were coded as yes (1 or 100% adherent) or no (0 or 0% adherent). Number of dental visits was coded as 2 or more dental visits- 100% adherent, 1 visit- 50% adherent, and no visits- 0% adherent. Mammogram adherence was coded as having received a mammogram within the past 1 or 2 years- 100% adherent, within the past 3-5 years- 50% adherent, within the past 5 or more years- 25% adherent, and having never received a mammogram- 0% adherent.

**Table 2: Chi-Square Tests of Significance of Health Personality Profiles and Predictors**

|  | Medically<br>Prudent<br>% | Safety Net<br>Users<br>% | Medically<br>Disadvantaged<br>% | Medical<br>Embracers<br>% | Total<br>% |
|--|---------------------------|--------------------------|---------------------------------|---------------------------|------------|
| <b>Age**</b>                               |                           |                          |                                 |                           |            |
| Under 30                                   | 15.6                      | 22.5                     | 16.1                            | 9.2                       | 13.2       |
| 30-44                                      | 36.9                      | 40.8                     | 28.8                            | 26.3                      | 32.2       |
| 45-64                                      | 31.3                      | 26.8                     | 28.8                            | 36.2                      | 33.0       |
| 65 and Older                               | 16.2                      | 9.9                      | 26.3                            | 28.3                      | 21.5       |
| <b>Gender</b>                              |                           |                          |                                 |                           |            |
| Male                                       | 30.0                      | 36.6                     | 35.6                            | 30.8                      | 30.8       |
| Female                                     | 70.0                      | 63.4                     | 64.4                            | 69.2                      | 69.2       |
| <b>Race/Ethnicity**</b>                    |                           |                          |                                 |                           |            |
| Non-Hispanic White                         | 76.5                      | 37.7                     | 63.1                            | 76.3                      | 74.5       |
| Non-Hispanic Black                         | 11.1                      | 21.7                     | 20.7                            | 14.9                      | 13.5       |
| Hispanic                                   | 12.4                      | 40.6                     | 16.2                            | 8.8                       | 12.0       |
| <b>Education**</b>                         |                           |                          |                                 |                           |            |
| High School or Less                        | 41.3                      | 66.2                     | 60.3                            | 41.7                      | 43.2       |
| Some College or More                       | 58.7                      | 33.8                     | 39.7                            | 58.3                      | 56.8       |
| <b>Employment**</b>                        |                           |                          |                                 |                           |            |
| Full-time                                  | 50.0                      | 36.6                     | 36.4                            | 42.5                      | 45.8       |
| Part-time                                  | 12.0                      | 14.1                     | 7.6                             | 11.3                      | 11.5       |
| Unemployed                                 | 4.2                       | 8.5                      | 5.1                             | 4.1                       | 4.3        |
| Not in Labor Force                         | 33.8                      | 40.8                     | 50.8                            | 42.1                      | 38.3       |
| <b>Health Status**</b>                     |                           |                          |                                 |                           |            |
| Poor                                       | 4.2                       | 12.7                     | 10.2                            | 4.6                       | 5.0        |
| Fair                                       | 12.7                      | 25.4                     | 22.9                            | 11.9                      | 13.3       |
| Good                                       | 28.3                      | 22.5                     | 27.1                            | 28.0                      | 27.9       |
| Very Good                                  | 28.4                      | 15.5                     | 16.1                            | 30.2                      | 28.1       |
| Excellent                                  | 26.4                      | 23.9                     | 23.7                            | 25.3                      | 25.8       |
| <b>Insurance**</b>                         |                           |                          |                                 |                           |            |
| Uninsured                                  | 11.6                      | 34.8                     | 25.4                            | 5.1                       | 10.4       |
| Public Insurance                           | 18.0                      | 20.3                     | 32.2                            | 22.9                      | 20.8       |
| Private Insurance                          | 70.4                      | 44.9                     | 42.4                            | 72.0                      | 68.8       |
| <b>Language Spoken at Home**</b>           |                           |                          |                                 |                           |            |
| English                                    | 90.8                      | 63.4                     | 78.0                            | 94.1                      | 90.6       |
| Other                                      | 9.2                       | 36.6                     | 22.0                            | 5.9                       | 9.4        |
| <b>Marital Status**</b>                    |                           |                          |                                 |                           |            |
| Married/Cohabitation                       | 56.3                      | 45.1                     | 55.6                            | 62.4                      | 58.4       |
| Single/Never Married                       | 19.8                      | 33.8                     | 17.9                            | 14.8                      | 18.1       |
| Widowed/Divorced/Separated                 | 24.0                      | 21.1                     | 26.5                            | 22.9                      | 23.6       |
| <b>Federal Poverty Level (FPL)**</b>       |                           |                          |                                 |                           |            |
| 0-100% of FPL                              | 6.7                       | 23.9                     | 14.5                            | 5.8                       | 7.3        |
| 101-200% of FPL                            | 21.1                      | 38.0                     | 40.2                            | 17.3                      | 21.1       |
| 201-350% of FPL                            | 32.6                      | 23.9                     | 25.6                            | 30.3                      | 31.0       |
| 351% or more of FPL                        | 39.7                      | 14.1                     | 19.7                            | 46.6                      | 40.7       |
| <b>Delay Prescription Drug Treatment**</b> |                           |                          |                                 |                           |            |
| No   | 80.9                      | 84.5                     | 78.8                            | 90.7                      | 84.9       |
| Yes  | 19.1                      | 15.5                     | 21.2                            | 9.3                       | 15.1       |
| <b>Usual Place of Care**</b>               |                           |                          |                                 |                           |            |
| Safety Net                                 | 3.7                       | 9.9                      | 7.6                             | 2.7                       | 3.7        |
| ER/No Usual Place                          | 17.1                      | 25.4                     | 23.7                            | 9.3                       | 14.5       |
| Private Office                             | 79.2                      | 64.8                     | 68.6                            | 88.0                      | 81.8       |

\*\* p ≤ .001

### Characteristics of the Medically Prudent

Those individuals classified as the medically prudent are more likely to agree that, “If you are healthy, having health insurance is still a necessity” and “If I take the right actions, I can stay healthy”, but are also more likely to agree with the statement that, “For the most part, I only go to the doctor when a health problem gets bad” and, “Even when I am sick, I prefer not to take medications”.

The medically prudent are also more likely to be slightly younger in age. They are less likely to be non-Hispanic black, and are less likely to be uneducated. They typically have private insurance and are English-speaking, delay prescription drug treatments due to cost, and report a private doctor’s office as their usual source of care.

### Characteristics of the Safety Net Users

These individuals are named the Safety Net Users because they were the most likely to agree with the statement that, “Having my medical needs taken care of at a public or free clinic is fine with me”, and the least likely to agree that, “If you are healthy, having health insurance is still a necessity”.

The safety net users are more likely to be younger adults, Hispanic, unemployed or part-time workers, uninsured, and non-English speaking at home. They are also more likely to have a high school education or less, report being in poor or fair health, be single and never have been married, report very low household incomes, and report a safety net provider or no source as their usual source of care.

### Characteristics of the Medically Disadvantaged

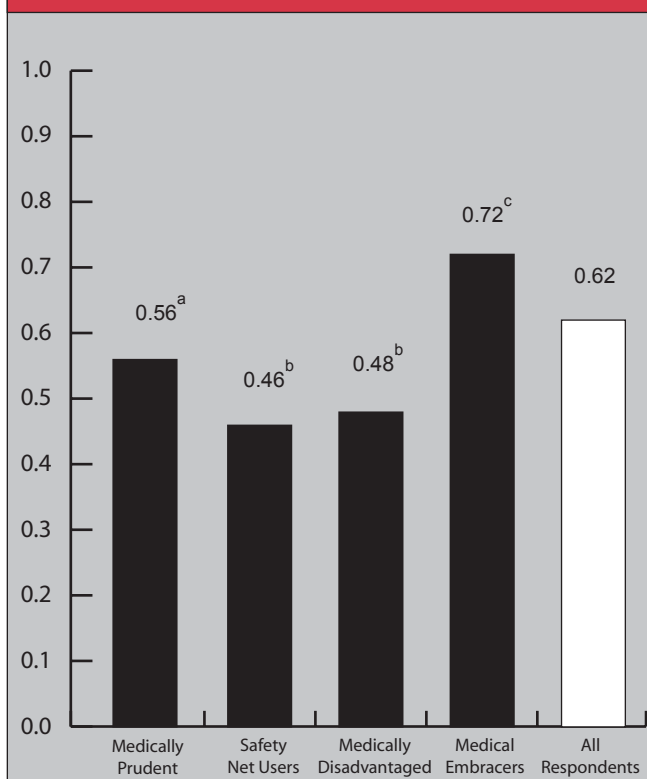
The medically disadvantaged agree with the statements, “Having my medical needs taken care of at a public or free clinic is fine with me”, and “If you are healthy, having health insurance is still a necessity”. They also were more likely to agree with the statements, “If you wait long enough, most health problems go away by themselves”, “For the most part, I only go to the doctor when a health problem gets bad”, and, “Even when I am sick, I prefer not to take medications”.

The medically disadvantaged are more likely to be younger adults under the age of 30 or older adults over the age of 64, and are predominantly non-Hispanic black and Hispanic. They typically have a high school education or less, are unemployed, and report being in poor or fair health. They also are more likely to be uninsured or publicly insured, non-English speaking at home, and have very low household incomes. They delay prescription drug treatment due to cost issues, and report a safety net provider or no usual source as their usual source of care.

### Characteristics of the Medical Embracers

The medical embracers strongly agree that, “If you are healthy, having health insurance is still a necessity”, and are the least likely to agree with the statements that, “If you wait long enough, most health problems go away by themselves”, “For

**Figure 1. Total Preventive Adherence Score by Health Personality Profiles**



Note: All differences are statistically significant at  $p < .05$  (ANOVA). Means with different letters are significantly different at the  $p < .05$  level using Tukey HSD post hoc tests.

**Table 3: Chi-Square Tests of Significance of Health Personality Profiles and Outcomes**

|  | Medically Prudent<br>% | Safety Net Users<br>% | Medically Disadvantaged<br>% | Medical Embracers<br>% | Total<br>% |
|--|------------------------|-----------------------|------------------------------|------------------------|------------|
| <b>Total Preventive Compliance Score**</b> |                        |                       |                              |                        |            |
| 0.00-0.50                                  | 45.1                   | 52.9                  | 52.7                         | 21.5                   | 36.0       |
| 0.51-1.00                                  | 54.9                   | 47.1                  | 47.3                         | 78.5                   | 64.0       |
| <b># of Doctor Visits**</b>                |                        |                       |                              |                        |            |
| 0 Visits                                   | 25.9                   | 46.5                  | 41.5                         | 11.3                   | 21.4       |
| 1-2 Visits                                 | 30.1                   | 19.7                  | 20.3                         | 27.3                   | 28.1       |
| 3-6 Visits                                 | 29.3                   | 21.1                  | 25.4                         | 39.4                   | 33.0       |
| > 6 Visits                                 | 14.8                   | 12.7                  | 12.7                         | 22.0                   | 17.6       |
| <b># of Prescription Drugs Taken**</b>     |                        |                       |                              |                        |            |
| 0 Prescriptions                            | 44.2                   | 50.7                  | 46.6                         | 27.5                   | 37.7       |
| 1 Prescription                             | 18.6                   | 12.7                  | 16.1                         | 15.7                   | 17.1       |
| 2-3 Prescriptions                          | 22.0                   | 21.1                  | 19.5                         | 30.5                   | 25.3       |
| > 3 Prescriptions                          | 15.1                   | 15.5                  | 17.8                         | 26.3                   | 19.9       |
| ** p ≤ .001                                |                        |                       |                              |                        |            |

the most part, I only go to the doctor when a health problem gets bad”, “Even when I am sick, I prefer not to take medications”, and “I have problems finding time to get to the doctor”.

Further analysis revealed that medical embracers are more likely to be older adults, are less likely to be Hispanic, and less likely to be educated. They are less likely to be in the labor force, and are less likely to be uninsured. They are English-speaking individuals, and report higher household income levels, do not delay prescription drug treatments due to cost issues, and report receiving health care at a private office.

**Predictors of Total Preventive Adherence, Doctor Visits, and Prescription Drug Use**

With regards to total preventive adherence, individuals who were female, educated, insured, wealthier, receive care at a safety net location or a private office, and are classified as “medical embracers”, were more likely to adhere to age and gender appropriate preventive health behaviors. In contrast, respondents who were female, unemployed, in poorer health, insured, English-speaking, prescription drug

treatment delayers, those who reported receiving health care at a private office setting, and those who were classified as “medically disadvantaged” and “medical embracers” were more likely to have more doctor visits in the past 12 months. Lastly, respondents who were over the age of 44, female, not African American, unemployed, in poorer health, insured, not married or cohabitating, prescription drug treatment delayers, those who report receiving care at a private office setting, and those classified as “medical embracers” were more likely to use more prescription drugs in the past 12 months.

**Conclusion & Policy Implications**

Adherence with preventive care recommendations is linked to a number of factors such as age, gender, race/ethnicity, education, insurance status, income, and usual source of care, but it is also linked with health attitudes. One way to improve preventive health behavior would be to target outreach and education to people based on these health attitude profiles and to understand the composition of the different profile groups with regards to demographics, insurance status, and usual source of health care.

**Table 4: Linear Regression Analyses that Predict Health Care Utilization Among NJFHS Respondents**

|  | Total Preventive Adherence |              | # of Doctor Visits |              | # of Prescription Drugs Taken |              |
|--|----------------------------|--------------|--------------------|--------------|-------------------------------|--------------|
|  | Model 1<br>β               | Model 2<br>β | Model 1<br>β       | Model 2<br>β | Model 1<br>β                  | Model 2<br>β |
| <b>Age</b>                                   |                            |              |                    |              |                               |              |
| Under 30                                     | -.032                      | -.030        | -.021              | -.020        | -.036                         | -.034        |
| 30-44 <sup>a</sup>                           |                            |              |                    |              |                               |              |
| 45-64  | .041                       | .021         | -.020              | -.037        | .138**                        | .123**       |
| 65 and Older                                 | .078*                      | 0.48         | .003               | -.024        | .235**                        | .211**       |
| <b>Gender</b>                                |                            |              |                    |              |                               |              |
| Male <sup>a</sup>                            |                            |              |                    |              |                               |              |
| Female                                       | .095**                     | .094**       | .080**             | .076**       | .062**                        | .060**       |
| <b>Race/Ethnicity</b>                        |                            |              |                    |              |                               |              |
| Non-Hispanic White <sup>a</sup>              |                            |              |                    |              |                               |              |
| Non-Hispanic Black                           | .046*                      | .029         | -.020              | -.032        | -.039*                        | -.052*       |
| Hispanic                                     | .011                       | .003         | -.002              | -.011        | -.018                         | -.025        |
| <b>Education</b>                             |                            |              |                    |              |                               |              |
| High School or Less <sup>a</sup>             |                            |              |                    |              |                               |              |
| Some College or More                         | .087**                     | .086**       | .041               | .038         | .027                          | .026         |
| <b>Employment</b>                            |                            |              |                    |              |                               |              |
| Full-time <sup>a</sup>                       |                            |              |                    |              |                               |              |
| Part-time                                    | .040                       | .038         | .030               | .027         | .002                          | -.001        |
| Unemployment                                 | .013                       | .010         | .032               | .028         | .037                          | .033         |
| Not in Labor Force                           | .036                       | .032         | .157**             | .158**       | .073*                         | .071*        |
| <b>Health Status</b>                         |                            |              |                    |              |                               |              |
|  | .039                       | .032         | -.248**            | -.256**      | -.335**                       | -.339**      |
| <b>Insurance</b>                             |                            |              |                    |              |                               |              |
| Uninsured                                    | -.193**                    | -.182**      | -.158**            | -.144**      | -.130**                       | -.123**      |
| Public                                       | -.016                      | -.022        | .028               | .023         | -.009                         | -.012        |
| Private <sup>a</sup>                         |                            |              |                    |              |                               |              |
| <b>Language</b>                              |                            |              |                    |              |                               |              |
| English                                      | .025                       | .017         | .067*              | .051*        | .042                          | .036         |
| Other <sup>a</sup>                           |                            |              |                    |              |                               |              |
| <b>Marital Status</b>                        |                            |              |                    |              |                               |              |
| Married/ Cohabitation                        | .039                       | .030         | -.045              | -.052*       | -.062*                        | -.069*       |
| Single/ Never Married                        | -.023                      | -.026        | -.049              | -.049        | -.037                         | -.039        |
| Widowed/ Divorced/<br>Separated <sup>a</sup> |                            |              |                    |              |                               |              |
| <b>Poverty Level</b>                         |                            |              |                    |              |                               |              |
| 0-100% of FPL                                | -.077*                     | -.067*       | -.033              | -.022        | -.041                         | -.035        |
| 100-200% of FPL                              | -.149**                    | -.133**      | -.060*             | -.040        | -.048*                        | -.035        |
| 201-350% of FPL                              | -.079*                     | -.069*       | -.036              | -.026        | -.049*                        | -.041*       |
| > 350% of FPL <sup>a</sup>                   |                            |              |                    |              |                               |              |
| <b>Delay Prescription Drug Treatment</b>     |                            |              |                    |              |                               |              |
| No <sup>a</sup>                              |                            |              |                    |              |                               |              |
| Yes  | -.031                      | -.011        | .066**             | .083**       | .071**                        | .087**       |
| <b>Usual Place of Care</b>                   |                            |              |                    |              |                               |              |
| Safety Net                                   | .062*                      | .059*        | .046*              | .045*        | .015                          | .013         |
| ER/No Usual Place <sup>a</sup>               |                            |              |                    |              |                               |              |
| Private Office                               | .168**                     | .152**       | .145**             | .129**       | .075**                        | .062*        |
| <b>Health Personality Profiles</b>           |                            |              |                    |              |                               |              |
| Medically Prudent <sup>a</sup>               | ---                        |              | ---                |              | ---                           |              |
| Safety Net Users                             | ---                        | .004         | ---                | -.032        | ---                           | .015         |
| Medically                                    |                            |              |                    |              |                               |              |
| Disadvantaged                                | ---                        | -.010        | ---                | -.052*       | ---                           | -.018        |
| Medical Embracers                            | ---                        | .190**       | ---                | .163**       | ---                           | .150**       |

\* p ≤ .05, \*\* p ≤ .001

<sup>a</sup> Indicates Comparison Group

--- Indicates Not Included in Model

Although some people may be non-adherent for financial reasons, a large number may be non-adherent because they do not understand the role that preventive behaviors and early detection play in maintaining health and preventing disease. In addition, future survey research using large, representative populations should include items on health attitudes in order to further

understand the interaction between demographic and health attitudinal factors and their impact on adherence to recommended preventive care. Given the cross-sectional nature of this data, the causality of the findings cannot be determined; thus, future research on how well attitudes predict future utilization patterns in longitudinal studies may help determine causality.

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## Methods

This *Facts & Findings* is based on data for the 2,265 respondents of the NJFHS. The selected respondent in the family was the person most knowledgeable about the health and health care needs of the family. Only the respondents were used in this analysis, as opposed to the entire sample population (N= 6,466), because all the data used in this analysis came directly from the respondent interviewed (the respondent answered most questions pertaining to everyone in the household, but answered questions regarding health attitudes solely for themselves).

Age and gender appropriate preventive health behaviors were used to assess the respondents' preventive health care utilization by computing a total preventive adherence score. This continuous measure was calculated based upon the respondent's answers pertaining to nine measures of preventive health behavior (see Table 1). Scores ranged from 0 to 1. Respondents who were 100% adherent in obtaining all age and gender appropriate preventive care received a score of 1. Respondents who were not adherent on any age and gender appropriate measure received a score of 0.

The number of doctor visits in the last 12 months and the number of prescription drugs taken in the last month were recoded into two quasi-continuous variables: 0 doctor visits, 1-2 doctor visits, 3-6 doctor visits, and 7 or more doctor visits; 0 prescription drugs taken, 1 prescription drug, 2-3 prescription drugs, and 4 or more prescription drugs taken.

The Health Personality Profiles were created based on the respondent's information on 14 distinct health attitude items. The health attitudes were answered on a Likert scale of 1-4 (1 = strongly disagree and 4 = strongly agree).

## CSHP's Facts & Findings

This is the sixth in a series of *Facts & Findings* from Rutgers Center for State Health Policy. These briefs highlight findings from major research initiatives at the Center, including the New Jersey Family Health Survey and the New Jersey State Physician Census.

### **Previous Facts & Findings:**

*Availability of Physician Services in New Jersey*, March 2006.

*New Jersey Physician Participation in Medicaid and NJ Family Care*, March 2006.

*Non-Group Health Insurance in New Jersey*, July 2004.

*Helping Patients Quit Smoking: The Role of New Jersey Physicians*, June 2004.

*Advance Care Planning in New Jersey*, April 2004.



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