

# Perceptions about Collaborative Decisions: The Decline of Perceived Provider Effectiveness among 2007 HINTS Respondents

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## Introduction

**Effective provider communication** is a crucial determinant of health outcomes.

Satisfaction with one's primary health care providers' **communication skills**, a new *Healthy People 2010* focus area, was recently reviewed through 4 criteria involving the patients' perception of their health care providers' skills in *listening* (11-6a), providing understandable *explanations* (11-6b), showing *respect* (11-6c), and spending enough *time* with them (11-6d), tasks central to efficacious public health practice.

For each of these attributes, the proportion of patients who rated their health providers positively was not universal and moved away from the target by 13-30 percentage points between 2000-2004.

A similar trend was recently observed within the context of National Cancer Institute data collected between 2003 and 2007 using a related research question that reported on perceptions of *mutual decision-making* in the **Health Information National Survey (HINTS)**.

## Purpose

To examine disparities among these responses that might impact attempts to prevent or treat cancer.

The two specific research questions were:

1. To what extent has the percentage or frequency of respondents who reported their perceptions or experiences about their health care provider's consistent willingness to involve them in decisions changed between 2003 and 2007?
2. What social factors, if any, are associated with past and current respondents' perceptions of their provider's willingness to involve them in health decisions?

## Materials and Methods

The data for this comparative descriptive analysis were retrieved from the **HINTS** website and initially analyzed using SPSS.

Thereafter, the SAS-Callable SUDAAN statistical program using Replicate Weight Jackknife procedures was used to better elucidate the key findings observed in the exploratory phase and any consistent or divergent trends across time. Crosstabulations using Chi Square Tests and Generalized Multinomial logit analysis with the same denominator and degrees of freedom (50 for both periods) were employed.

The 2003 + 2007 **HINTS** question, items **HC-04e**, **HS-07c** was: *How often did the providers you saw in the past 12 months involve you in decisions about your health care as much as you wanted?*

Response categories were:

- ALWAYS...1
- USUALLY...2
- SOMETIMES...3
- NEVER...4

### DEMOGRAPHIC VARIABLES EXAMINED WERE:

Age, Cancer History, Educational Status, Employment Status, Extent of Health Coverage, Income Level, Race, Regular Provider.

## Results

### Sampling and overall results

In 2003, 6369 observations were made; in 2007, 4092 observations were read and 3582 were skipped. [This was due to the fact, the most recent **HINTS** was mixed-mode dual frame design of Random Digit Dial telephone and mailed survey, and those who received the mailed surveys were excluded (Cantor & McBride, 2009). Analyses included Hispanics, Non-Hispanic Whites, Non-Hispanic Blacks, Other or Multiple races].

As in 2003, less than 100% of the 2007 respondents reported they were **'always'** involved in health care decisions as much as they wanted.

As in 2003, females represented approximately two thirds of the 2007 respondents.

Overall, the percentage of affirmative responses declined from **61% to 54.6%** between 2003 and 2007.

### Associations

While there was no observed gender effect on the reported perceptions in either 2003/2007 ( $p=.052$ ), there was a significant effect for ethnicity ( $p=.0005$ ) and being Hispanic was found to be associated with lower percentages of affirmative responses across both time periods. (See Figure 1)

Educational status, health coverage, income, and having a regular provider were significant ( $p=.001$ ) determinants in 2007.

In contrast to 2003 results, higher education was significantly associated with communication satisfaction, as was having a cancer diagnosis. (See Figure 2)

### Other trends

The percentage of positive responses associated with having a cancer history declined linearly over time.

Figure 1. Comparison of Gender and Ethnic Responses over Time

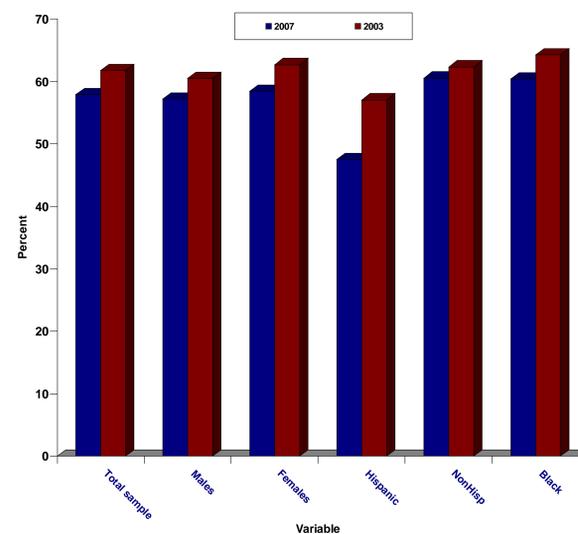


Figure 2. Comparison of Education, Income, Provider, Insurance and Cancer History Variables

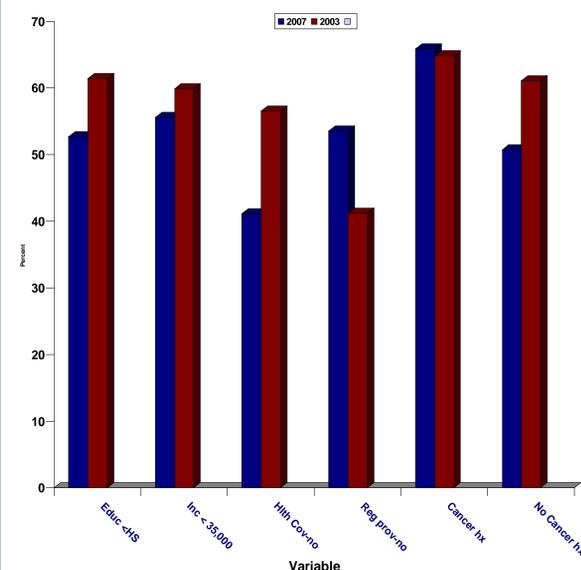


Table 1. Summary of Generalized Univariate and Generalized Multinomial logit analysis of the Relationship between selected Sociodemographic Variables and the Respondent's Overall Rating of his or her Primary Health Care Provider's Communication Behavior in the Past 12 Months in 2003 and 2007 for Decision Involvement

### Significant ( $p \leq 0.05$ ) Univariate Correlations

2003	2007
Race	Age
Age	Race
Education	Cancer history Y/N
Health Coverage	Education
Income	Health coverage
Regular Provider	Income
	Regular provider
	Years since cancer diagnosis

### Multivariate Correlations

Age, 18-34, $p=.009$	Health coverage, $p=.001$
Health coverage, $p=.030$	Regular provider, $p=.003$
Regular provider, $p=.001$	Cancer history, $p=.048$

Box 1. Selected odds ratios of significant predictors of patients' perceptions primary Providers 'always' included them in the decision making process in 2003 and/or 2007

2003	2007
Non-Hispanic Black 1.49	Cancer history, yes 1.50
Hispanic 0.99	Cancer history, no 1.00
Coverage, yes 1.35	Coverage, yes 2.12
Coverage, no 1.00	Coverage, no 1.00
Regular provider, yes 1.62	Regular provider, yes 1.75
No regular provider, 1.00	Regular provider, no 1.00

## Conclusions

A decreasing percentage of **HINTS** respondent's reported their providers **'always'** involved them in the decision-making process between 2003 and 2007 when interviewed by random digit dialing procedures.

Keeping the mode of interview consistent, a significant univariate relationship was consistently observed between several sociodemographic variables and the respondent perceptions about the consistency with which providers appear to include them as desired in decision making.

According to Cantor and McBride (2009), frames are relatively equivalent along age, race, gender, education and income. Yet, there were linear trends in education, ethnicity, and cancer diagnosis that may have influenced the 2003 and 2007 responses.

In particular, **health coverage**, and **having a regular provider** were social and health-related associations that may help to explain less than optimal provider collaboration and the overall decline between 2003 and 2007 in perceptions about the ability of providers to consistently engage in high-quality, collaborative communication with healthy adults, in particular.

## Implications

- Efforts to improve communication between adults and their providers is indicated in the context of cancer prevention and intervention, *regardless* of health status.
- Adults with **no health coverage** and **no regular provider** should be specifically targeted in preventive efforts to prevent and treat cancer (See Box 1).
- Also vulnerable are Hispanic adults, and those with less than high school education, and these adults should be targeted.
- Those in remission may need to be targeted as well.

Improving client provider communication in decision making may be a useful key to:

- Reducing the **cancer burden**.

## Key References

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