# **Factors Associated with Patients' Perceptions of Healthcare Providers' Communication Behavior**

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# **Background**

The manner in which physicians communicate with their patients has a significant impact on patients' health behaviors and health outcomes.

Three important patient-centered communication goals have been identified for physicians to accomplish during interactions with their patients:

- 1. Establish a good interpersonal relationship
- 2. Facilitate information exchange
- 3. Facilitate patient involvement in decision-making

# **Purpose**

The aim of our analysis was to gain a clearer understanding of the sociodemographic characteristics, healthcare access, and health status variables that influence patients' perceptions of the quality of communication with their healthcare providers utilizing a national sample.

We examined differences in patients' perceptions of healthcare providers' behaviors by key sociodemographic, healthcare access, and health status variables.

### Methods

#### Data Source

Data were from the 2003 Health Information National Trends Survey (HINTS).

HINTS collects nationally representative data every two years on the American public's need for, access to, and use of cancer information.

#### Survey Items

- · Sociodemographic Characteristics: sex, age, race, ethnicity, education, income,
- · Health Care Access, Use and Trust: insurance, usual source of health care.
- · Health Status: perceived health status, cancer history.
- Depressive Symptomology: Respondents were asked to rate five point scales the
  amount of time they experienced each 6 depressive symptoms. Responses were
  summed into a composite depressive symptoms score ranging from 6 to 30 with
  higher scores indicating greater depression (Cronbach's alpha=0.81).
- Provider Communication Behavior: Patients' perception of patient-provider communication was assessed using items borrowed from the Consumer Assessment of Health Plans Study. Respondents indicated on a four-point scale (always, usually, sometimes, never) how often doctors or other healthcare providers: 1) listened carefully to you, 2) explained things in a way you could understand, 3) showed respect for what you had to say, 4) spent enough time with you, and 5) involved you in decisions about your healthcare. We reversed scores so that higher scores indicated greater endorsement of the healthcare provider behavior and created a composite score from the sum of ratings on each item. The resulting composite ranged from 5 to 20 (Cronbach's alpha=0.82).

#### Data Collection, Response Rates, and Sample

- Data were collected from October 2002 through April 2003.
- The survey was administered to a representative sample of U.S. households using computer-assisted random-digit dialing from all telephone exchanges in the U.S.
- · Exchanges with high numbers of Blacks and Hispanics were over-sampled.
- Complete interviews were conducted with 6149 adults.
- The final response rate for the household screener was 55% and the final response rate for extended interview was 62.8%.
- The sample used in our analyses included 5343 respondents who reported that they saw a healthcare provider during the last year.

#### Data Analysis

- · SUDAAN was used to calculate the following:
  - Mean patient rating of physician behavior for various subgroups defined by sociodemographic, healthcare access, and health status variables.
  - Pearson correlation between ratings of healthcare providers' behavior and depressive symptom scores.
  - Linear regression analyses to examine the association of sociodemographic characteristics, healthcare access, and health status variables with patients' ratings of providers' communication behavior.

## Results

Ratings of providers' communication were favorable (Mean=17.3). Table 1 summarizes patients' ratings of communication behavior for subgroups.

	Mean	N	SE	
	Patient		Mean	
Sociodemographics	Rating			
Sex				
Male	17.3	1851	0.09	
Female	17.4	3384	0.06	
Race				
Non-Hispanic white	17.5	3622	0.05	
Non-Hispanic black	17.5	592	0.18	
Hispanic	16.6	553	0.24	
Other or multiple races	16.7	242	0.25	
Income				
<\$35,000	17.1	1983	0.11	
\$35,000 to <\$75,000	17.4	1629	0.10	
\$75,000+	17.5	1031	0.10	
Education				
Less than high school	17.1	551	0.19	
High school	17.3	1466	0.09	
Some college	17.4	1388	0.10	
College graduate	17.5	1655	0.07	
Age				
18-34	17.1	1245	0.11	
35-64	17.3	2849	0.06	
65+	17.9	1132	0.10	
Employment				
Employed	17.3	2890	0.07	
Out of work	16.8	251	0.27	
Retired, student, homemaker	17.6	1664	0.11	
Unable to work	16.8	252	0.21	
Marital Status				
Married	17.4	2731	0.05	
Divorced, separated,	17.3	1365	0.14	
widowed	17.1	799	0.13	
Never married	17.1	162	0.25	
Unmarried couple				
Healthcare Access			ı	
Health Insurance				
No	16.3	443	0.22	
Yes	17.5	4619	0.05	
Usual Provider		1250	0.10	
No	16.5	1250	0.12	
Yes	17.6	3972	0.06	
Health Status				
Perceived Health	17.0	2212	0.00	
Excellent/very good	17.8	2213	0.09	
Good Fair/Poor	17.4 16.5	1705 1154	0.08 0.15	
Cancer History	10.3	1134	0.13	
No.	17.3	4515	0.06	
Yes	17.3	707	0.06	
Depressive symptoms Score	Pearson	N	p-value	
Depressive symptoms score	rearson	5030	<.0001	
	20	3030	<.0001	

Table 2 summarizes the results of the linear regression analyses.

Sociodemographics	Beta	SE Beta	t-test	p- value	95% CI	
					lower	upper
Sex						
Male	0					
Female	0.06	0.14	0.42	0.68	-0.22	0.33
Race		0.12		0.00	0.11	0.00
Non-Hispanic white	0					
Non-Hispanic black	0.22	0.21	1.07	0.29	-0.20	0.64
Hispanic	-0.44	0.21	-1.75	0.09	-0.20	0.04
Other or multiple races	-0.44	0.23		0.09	-0.93	0.07
	-0.49	0.31	-1.58	0.12	-1.11	0.13
Income						
<\$35,000	0					
\$35,000 to <\$75,000	-0.13	0.15	-0.87	0.39	-0.43	0.17
\$75,000+	-0.14	0.17	-0.80	0.42	-0.48	0.21
Education						
Less than high school	0					
High school	-0.25	0.24	-1.03	0.31	-0.74	0.24
Some college	-0.13	0.24	-0.57	0.57	-0.61	0.34
College graduate	-0.39	0.20	-1.92	0.06	-0.80	0.02
Age						
18-34	0					
35-64	0.06	0.15	0.40	0.69	-0.25	0.37
65+	0.30	0.13	1.28	0.09	-0.23	0.37
	0.30	0.24	1.28	0.20	-0.17	0.78
Employment						
Employed	0					
Out of work	0.28	0.33	0.86	0.39	-0.38	0.95
Retired, student, homemaker	0.03	0.14	0.23	0.82	-0.26	0.32
Unable to work	0.13	0.29	0.43	0.67	-0.47	0.72
Marital Status						
Married	0		١.			
Divorced, separated, widowed	-0.09	0.16	-0.57	0.57	-0.41	0.23
Never married	0.06	0.18	0.37	0.71	-0.29	0.42
Unmarried couple	0.03	0.25	0.11	0.91	-0.47	0.53
Healthcare Access	0.03	0.23	0.11	0.71	-0.47	0.55
Health Insurance						
No	0					
Yes	0.68	0.25	2.79	0.007	0.19	1.18
Usual Provider						
No	0					
Yes	1.14	0.16	7.36	0.000	0.83	1.46
Health Status						
Perceived Health						
Excellent/very good	0	l .		l .		Ι.
Good	-0.15	0.12	-1.27	0.21	-0.38	0.09
Fair/Poor	-0.96	0.20	-4.74	0.000	-1.36	-0.55
Cancer History	3.70	20	, .			3.55
No.	0	l	l			l
Yes	20	0.21	96	0.34	-0.61	0.22
Depressive symptoms Score	-0.11	.02	-5.68	0.000	-0.15	-0.07

## Conclusions

- •Provider communication can have a significant impact on health behaviors and outcomes
- •Our findings may inform efforts to enhance communication with subgroups of patients through improvements in clinical practice and health policies.
- •Awareness that individuals with poorer health and/or depressive symptoms may perceive interactions with physicians as inadequate may indicate that additional efforts need to be made to effectively communicate important health information.
- Access to a usual source of healthcare and health insurance influences patients' ratings of providers' communication behavior; continued policy-level efforts to provide access to healthcare and continuity of care are needed.





