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**Role of Patient-Centered Communication in the Association between Usual Source of Health Care and Patients' Ratings of Quality of Care**

# Overview

- Background
    - Usual source of care
    - Patient-centered communication

- Communication Framework

- Mediation Analysis – HINTS 4 (cycle 1)

# Background

## Usual source of healthcare

- Greater use of preventive services;
- Decreased use of emergency services;
- Higher ratings of quality and satisfaction
  - **Ongoing patient-provider relationships may, in part, be fostered by patient-centered communication.**
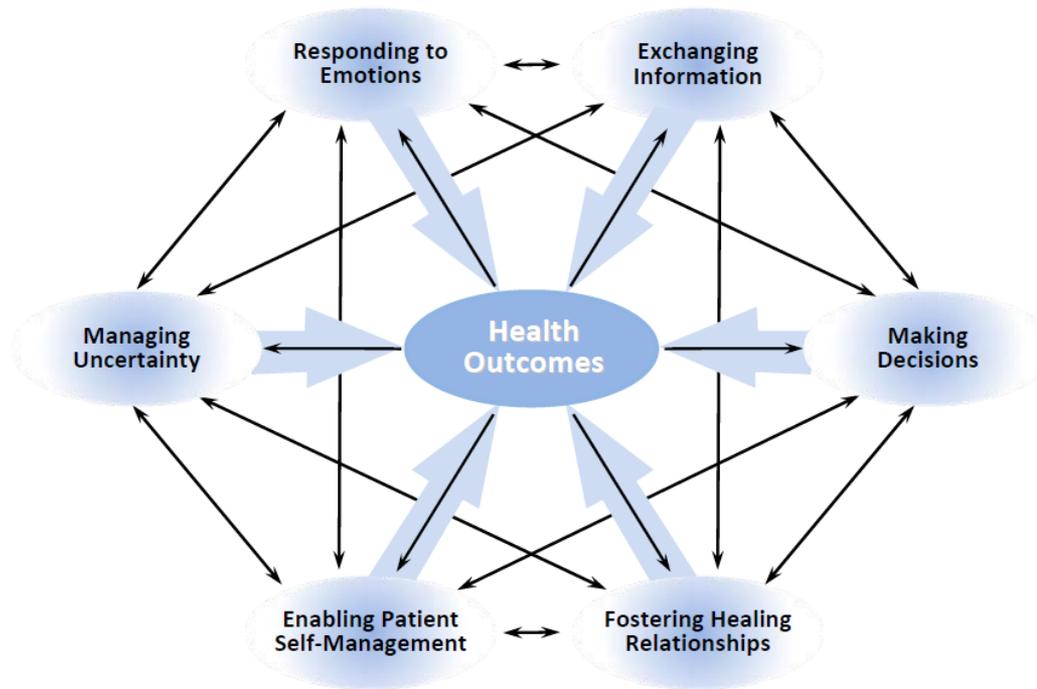
## Patient-centered communication

- Adherence to treatment recommendations;
- Management of chronic disease;
- Quality of life;
- Disease-related outcomes.

# Patient-Centered Communication Framework

Communication functions that guide clinical interactions:



**Patient-Centered Communication in Cancer Care**
Promoting Healing and Reducing Suffering
Epstein, R.M., Street, Jr., R.S. (2007) P. 18

# Purpose



Evaluate the interrelationships between having a **usual source of care**, **patient-centered communication**, and patients' **ratings of health care quality**.



Hypothesis: the association between usual source of care and ratings of healthcare quality would be **mediated** by patient-centered communication.

# Methods

## Data

- HINTS 4 Cycle 1
- October 2011 - February of 2012
- n=3959

## Mode

- Mailed questionnaire
- English and Spanish

## Sampling

- Frame: comprehensive national listing of USPS addresses
- Design: two-stage, stratified sample (household/individual)

## Response Rate

- Household x Individual
- Final: 36.7%

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# Measures

**Sociodemographic Variables**
- Sex, age, education, race/ethnicity, annual household income, health insurance status.

**Usual Source of Healthcare**
- "Not including psychiatrists and other mental health professionals, is there a particular doctor, nurse, or other health professional that you see most often?" (yes/no)

**Healthcare Use**
- "In the past 12 months, not counting the times you went to the emergency room, how many times did you go to a doctor, nurse, or other health professional to get care for yourself?"

**Ratings of Healthcare Quality**
- "Overall, how would you rate the quality of healthcare you received in the last 12 months?".

# Measures: Patient-Centered Communication

**Exchanging Information**
- "Give you the chance to ask all the health-related questions you had"
- "Explain things in a way you could understand"

**Responding to Emotions**
- "Give the attention you needed to your feelings and emotions?"

**Making Decisions**
- "Involve you in decisions about your healthcare as much as you wanted?";

**Enabling Patient Self-Management**
- "Make sure you understood the things you needed to do to take care of your health?"

**Managing Uncertainty**
- "Help you deal with feelings of uncertainty about your health or healthcare?".

**Foster healing relationships**
- "During the past 12 months, how often did you feel you could rely on your doctors, nurses, or other healthcare professionals to take care of your healthcare needs?"
- "Spend enough time with you?"

# Data Analysis

## SUDAAN version 9.0.1

- Analyze the complex survey data
- Obtain correct variance estimates.

## Weighted Data

- Representative estimates of the adult US population.

## Mediation analysis

- Barron and Kenny's method

# Regression Models: Establish Mediation

**Step 1**
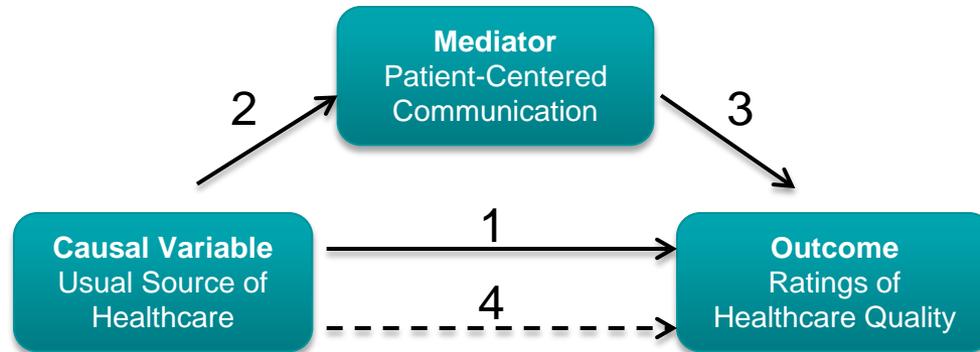
☐ Causal Variable - Outcome

**Step 2**

☐ Causal Variable - Mediator

**Step 3**

☐ Mediator - Outcome

**Step 4**

☐ Causal-Outcome [Mediator]

# Results

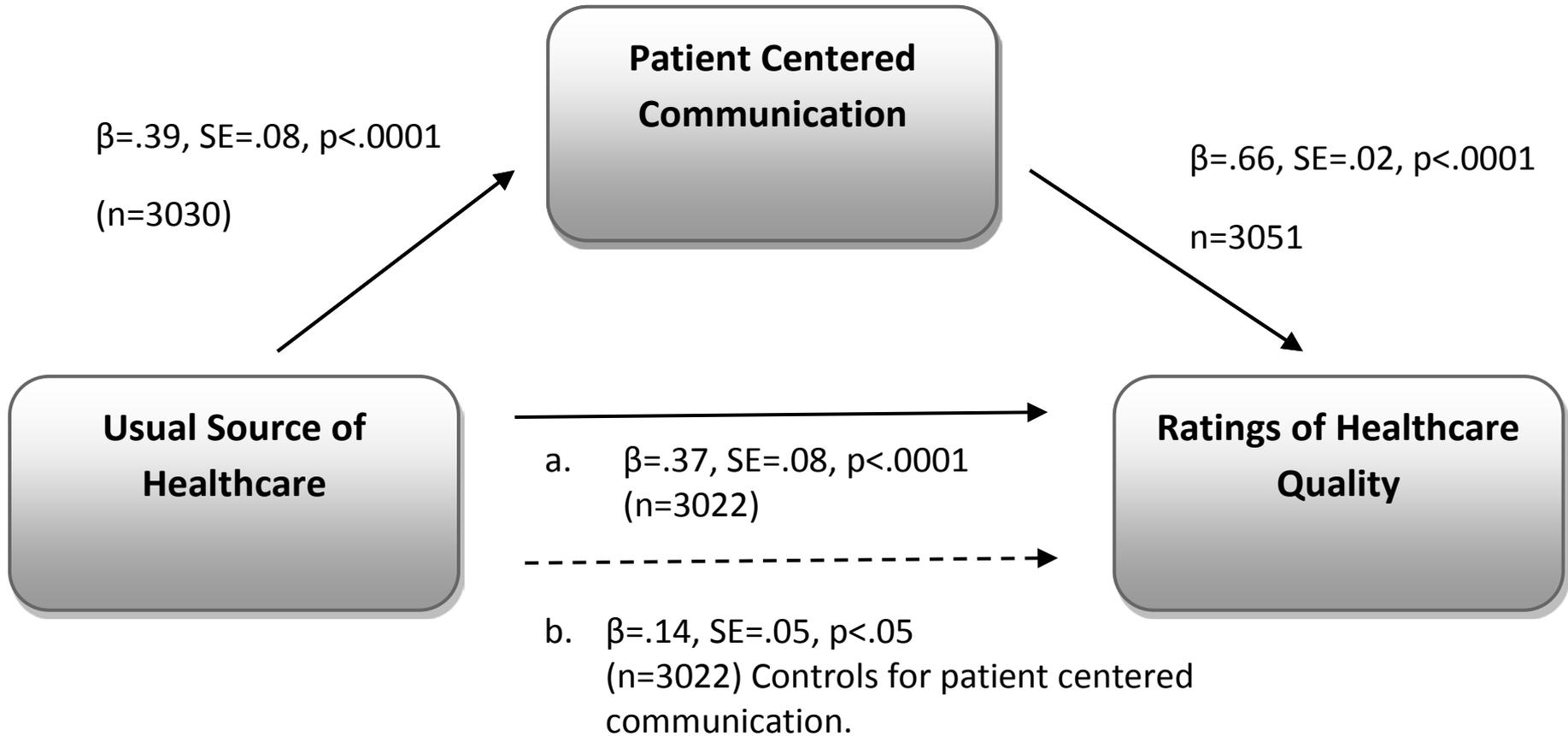## Usual source of care observed more frequently among:

- Females
- Older adults
- Non-Hispanic whites
- Those with higher education
- Those with health insurance
- Those with higher incomes

## Those with a usual source of care had significantly:

- More visits to healthcare providers during the past year;
- Higher ratings of healthcare quality;
- More patient-centered communication.

# Results



**Patient Centered Communication**

β=.39, SE=.08, p<.0001

(n=3030)

β=.66, SE=.02, p<.0001

n=3051

**Usual Source of Healthcare**

a.  β=.37, SE=.08, p<.0001 (n=3022)

b.  β=.14, SE=.05, p<.05 (n=3022) Controls for patient centered communication.

**Ratings of Healthcare Quality**

* Sobel test statistic:  4.82, p<.0001.  Regression analyses control for gender, age, education, income, race/ethnicity, health insurance status, and frequency of healthcare use.

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# Limitations

➤ Data are cross sectional

➤ Assessment of the patient-physician relationship can be nuanced and complex

➤ Low response rates

# Summary

➤ Respondents with a usual source of care reported better healthcare quality, and more patient-centered communication.

➤ The impact of usual source of care on ratings of care quality was hypothesized to operate through exposure to patient-centered communication, and our results supported this hypothesis.

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# Conclusions

➤ This nationally representative study lends support to putting a usual source of healthcare and patient-centered communication in the center of the patient-centered medical home.

➤ With high rates of chronic disease and associated complex care regimens in the U.S., patient-centered communication may be more important than ever.

➤ Fostering healing, trusting, and effective patient-provider relationships takes significant effort on the part of patients and their medical team.

➤ Research to investigate how to promote patient-centered communication and that evaluates its impact will play an increasingly important role in our efforts to reduce chronic disease and improve population health.