

# Linking Disability Status and Barriers of Care to Patient Satisfaction: An Analysis of the Moderating Role of Personal Doctor

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## Background

- Individuals with disabilities could experience barriers to health care services.
- Having a personal doctor may overcome or reduce the impact of barriers on satisfaction with care.

## Objective

- To assess the relationship between disability status and experienced barriers of care to patient reports of overall care, personal doctor, specialist, and health plan.
- To assess whether having a personal doctor moderates the following two relationships: 1) disability status and patient satisfaction, and 2) barriers of care and patient satisfaction.

## Methods

- The study included respondents to the Florida Medicaid Consumer Assessment of Healthcare Providers and Systems (CAHPS version 4), a representative telephone survey conducted between April-June 2013 of adults and children with Florida Medicaid insurance (N=2,042)

Weighted multivariable linear regression models (controlling for age, gender, race / ethnicity, education) and health status were used to:

- Assess the relationship between disability status and care barriers to ratings of health care.
- To assess whether having a personal doctor moderates the relationship between disability and barriers of care to patient reports of care.

### Predictor Variables

- Personal doctor** (y/n)
- Disability status** was assessed with two questions. Respondents were defined as having a disability if they indicated yes to one of the two following questions:
  - Are you limited in any way in any activities because of physical, mental, or emotional problems?
  - Do you now have any health problem that requires you to use special equipment, such as a cane, a wheelchair, or a special telephone?

## Methods

### Confirmatory Factor Analysis of barriers to care

- Performed on item tetrachoric correlations; standardized coefficients specified
- Correlation between latent variables
- Model fit assessed using CFI, TLI, SRMR, and RMSEA
- Two factor scores generated: Access (Getting into building; Getting on Exam Table; Getting a Physical Exam); Communication/Coordination (Communicating with Doctor; Coordinating Care).

### Dependent Variables

A 10-point scale was used to assess perceived satisfaction with overall care, personal doctor, and health plan (1=low; 10=high).

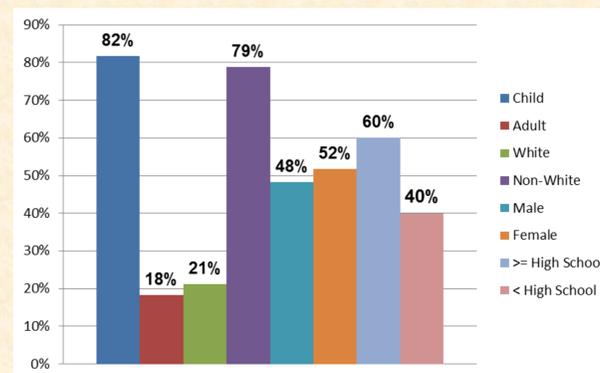
All analyses performed using Stata v 13

## Results: Summary

- Patient disability does not significantly predict evaluations of care overall or when interacted with access and communication factor or personal doctor (Table).
- Increasing communication and coordination barriers were associated with increased negative patient reporting pertaining to their health plan ( $\beta=-6.04$ ), personal doctor ( $\beta=-3.68$ ), and overall care ( $\beta=-4.49$ ).
- Additionally, with each increased physical access barrier a patient experienced they had more negative reports associated with their health plan ( $\beta=-3.54$ ).
- The relationship between both communication and physical barriers and care reports was moderated by personal doctor.
- The presence of a personal doctor mitigated the relation between:
  - Access Factors and Overall Care ( $\beta =5.96$ )
  - Access factors and Specialist ( $\beta =11.32$ )
  - Communication Factors and Specialist Care ( $\beta =8.84$ ).

## Results: Descriptive Findings

Descriptive characteristics of Medicaid CAHPS respondents, April-June 2013 (N=2,042)



Outcome Variables	N	Mean	SD
Overall Care Rating	1,562	8.61	1.92
Personal Doctor Rating	2,013	8.87	1.84
Specialist Rating	653	8.75	1.95
Health Plan Rating	2,025	8.42	2.12

## Results: Regression Analysis

Adjusted Associations between Disability Status; Access Barriers of Care; Communication Barriers of Care; Personal Doctor Interaction and Patient Satisfaction Ratings of Care (N=2,042)

Predictor Variables	Overall Care Rating	Personal Doctor Rating	Specialist Rating	Health Plan Rating
Disability Status	-1.91 (-6.97, 3.16)	-0.84 (-5.23, 3.55)	-0.01 (-5.37, 5.35)	-2.86 (-7.62, 1.90)
Interaction (Personal Doctor * Disability Status)	-0.17 (-9.25, 8.92)	-6.65 (-13.51, 0.20)	-1.05 (-10.12, 12.22)	-4.62 (-12.24, 3.10)
Access Factor Barriers	-1.72 (-4.19, 0.75)	-1.76 (-4.08, 0.56)	-0.69 (-2.63, 1.25)	<b>-3.54*</b> <b>(-6.71, -0.37)</b>
Interaction (Personal Doctor * Access Factor Barriers)	<b>5.96**</b> <b>(1.41, 10.52)</b>	3.81 (-1.13, 8.75)	<b>11.32**</b> <b>(8.80, 13.84)</b>	1.59 (-4.01, 7.20)
Communication Factor Barriers	<b>-4.49**</b> <b>(-7.61, -1.38)</b>	<b>-3.68**</b> <b>(-6.62, -0.74)</b>	-2.62 (-5.76, 0.52)	<b>-6.04**</b> <b>(-9.32, -2.76)</b>
Interaction (Personal Doctor * Communication Factor Barriers)	5.91 (-0.27, 12.10)	2.20 (-3.52, 7.93)	<b>8.84**</b> <b>(3.15, 14.54)</b>	0.04 (-6.06, 6.14)

\*  $p < 0.05$ ; \*\*  $p < 0.01$

## Conclusion and Future Research

- Patient's experiences of the care they receive are an important determinant of their evaluations of care.
- Future studies should investigate the patient-provider relationship within the Medicaid Managed Care Population.
- Such studies could elucidate factors that affect a patient's decision to report positive reports of care, even in light of physical and communication barriers experienced during health care services.

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