

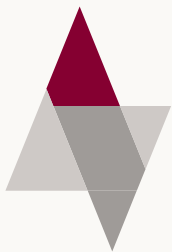
# Quality of Patient-Provider Communication by Race/Ethnicity: Updated Evidence from MEPS, 2015-2019

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# Outline

- Background
- Research objectives
- Methods
- Findings
- Limitations
- Conclusion and policy implication

## Background

Patient-provider communication (PPC) is a fundamental component of healthcare quality (1).

Four measures (2)



Listen carefully



Express respect



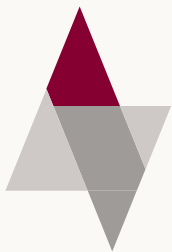
Explain clearly



Spend time

Efficient PPC is correlated with adherence, satisfaction, and the health outcomes of patients (3-7).

Disparities in PPC can increase mistrust and delay healthcare seeking (8-11).

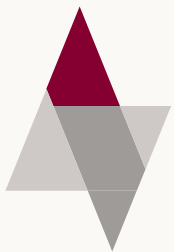


## Background, cont'd

- Disparity - patients' age, insurance coverage, poverty status, and race/ethnicity.
- Non-Hispanic Black (NHB) experience more disparities in PPC quality compared to non-Hispanic White (NHW) patients (12,13).

### Racial/ethnic concordance

- It generates more mutual understanding, patient adherence, and satisfaction with the health care provider (14-17).
- Interestingly, race concordance has not been shown to be a significant predictor of quality of PPC (18-22).



# Research objectives

## General objective

Explore whether racial concordance between the patient and provider improves the quality of patient-provider communication among U.S. adults.

## Specific objectives

- Assess whether the proportion of race concordant visits vary by race/ethnicity
- Evaluate the influence of race concordant visits on the quality of PPC
- Explore whether the effect of race concordant visits on the quality of PPC vary by race/ethnicity
- Assess the influence of sex concordant, and race and sex concordant visits on the quality of PPC



# Methods

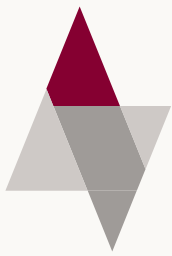
**Study design:** Cross-sectional correlational exploration

**Study population:** Civilian non-institutionalized U.S. adults aged 18 years and above but less than 65 years

## **Inclusion criteria**

- Aged 18 years and above but less than 65 years
- Responded to the self-administered questionnaire
- Made a visit to a provider in the past 12 months





## Methods, cont'd

**Data source:** Household component data from Medical Expenditure Panel Survey (MEPS) panel 19 through 23 which represent years from 2015 to 2019

**Outcome variable:** Four quality measures of PPC. 4-point Likert scale including never, sometimes, usually, or always. Dichotomized

**Independent variable:** Racial concordance between the patient and provider

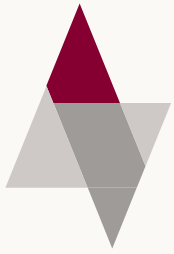
**Control variables:** Control variables are considered according to the domains of the Andersen Behavioral Model (23).

**Predisposing**

**Enabling**

**Need**

Additionally, provider category, provider type, and panel



## Methods, cont'd

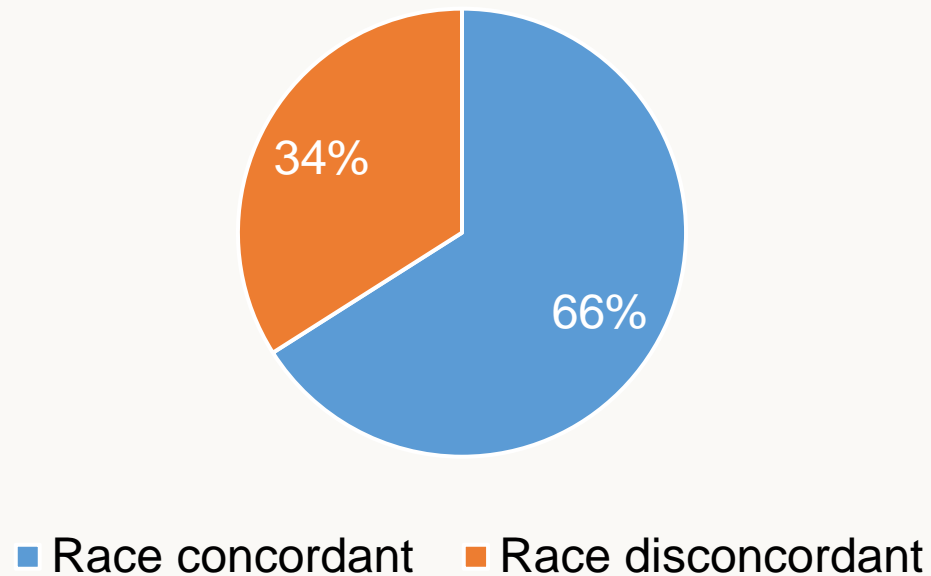
### Analysis plan

- Descriptive analysis: Chi-square test
- Regression analysis: Multivariable logistic regression
- Software: SAS Enterprise Guide 8.3
- Less than 0.05 ( $p$ -value $<0.05$ ) statistical significance level
- Adjusted for the complex survey design of MEPS-HC



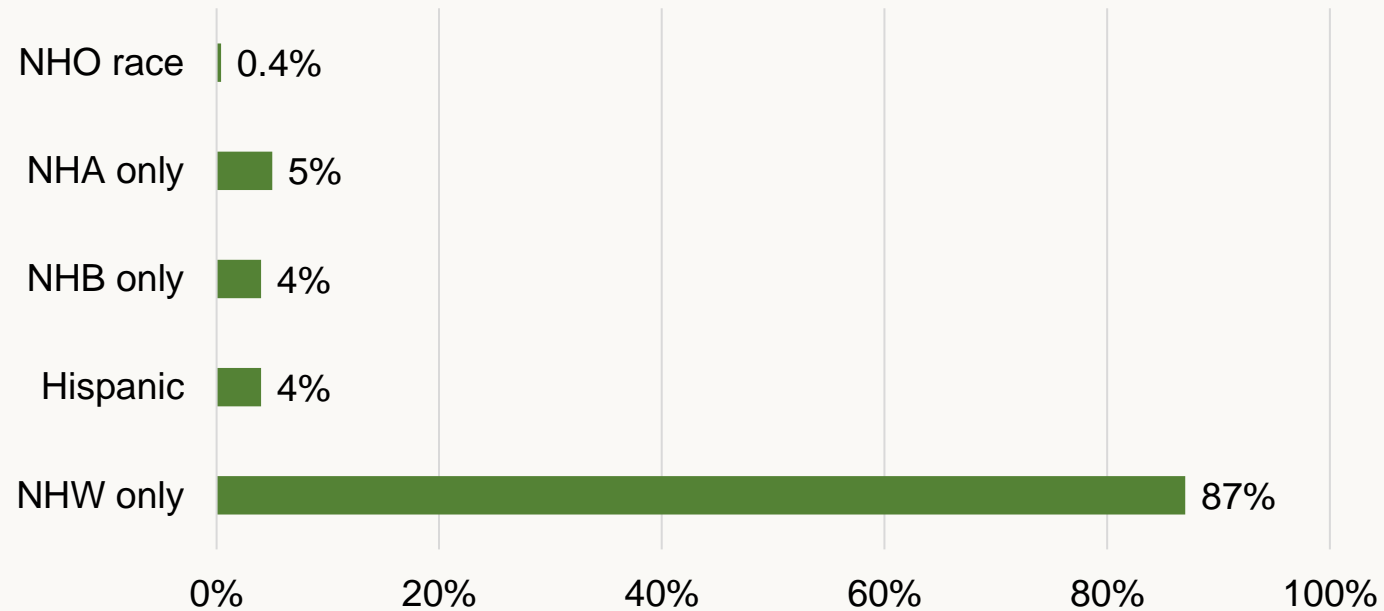
## Findings

- Unweighted N=8,607, Weighted N=48 million
- All the covariates except education status, perceived health and mental status, and use of health services were significantly associated with race concordant visits.



## Findings, cont'd

Race, %	All patients, %	Race concordant visits, %	Race discordant visits, %	<i>p</i> value
NHW only	71.1	80.8	19.2	<.0001
Hispanic	10.4	26.9	73.1	
NHB only	10.1	22.4	77.6	
NHA only	5.6	52.5	47.5	
NHO race	2.8	8.4	91.6	





## Findings, cont'd

	Listened carefully			Explained so you understand		
	Adjusted OR	CI	<i>p</i> value	Adjusted OR	CI	<i>p</i> value
Race concordant	1.37	1-1.8	0.02	1.42	1.1-1.8	0.008

	Showed respect			Spent enough time		
	Adjusted OR	CI	<i>p</i> value	Adjusted OR	CI	<i>p</i> value
Race concordant	1.35	1-1.76	0.03	1.15	0.9-1.4	0.2



## Findings, cont'd

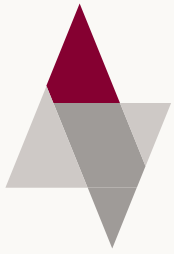
	Listened carefully			Explained so you understand		
	Adjusted OR	CI	<i>p</i> value	Adjusted OR	CI	<i>p</i> value
<b>Hispanic</b>	0.8	0.4-1.6	0.97	0.9	0.4-2.4	0.29
<b>NHB only</b>	0.64	0.4-1.1	0.36	0.57	0.3-1	0.64
<b>NHA only</b>	0.66	0.4-1.3	0.48	0.37	0.1-1.2	0.21
<b>NHO race</b>	1	0.2-5.7	0.71	0.59	0.1-2.9	0.89

	Showed respect			Spent enough time		
	Adjusted OR	CI	<i>p</i> value	Adjusted OR	CI	<i>p</i> value
<b>Hispanic</b>	1.67	0.9-3.2	0.16	1.55	0.8-2.9	0.14
<b>NHB only</b>	1.1	0.7-1.9	0.92	1.24	0.7-2.1	0.57
<b>NHA only</b>	1	0.5-2.1	0.88	0.81	0.3-2	0.42
<b>NHO race</b>	0.77	0.15-4.1	0.63	0.92	0.3-3.4	0.78



## Findings, cont'd

- Sex concordant visits did not have any significant association
- Race and sex concordant visits were significantly associated with providers listening carefully (UOR=1.3,  $p=0.013$ ) and explaining with clarity (UOR=1.25,  $p=0.049$ )



## Limitations

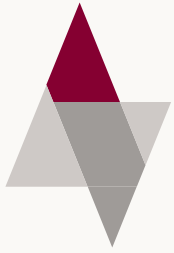
- Imprecision when the patients couldn't correctly perceive or recall their providers' race/ethnicity
- Response to quality-of-care measures may be influenced by recall bias
- MEPS oversamples minority populations-selection bias



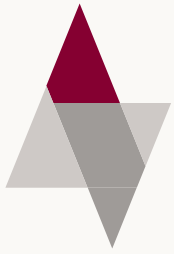


## Conclusion and policy implication

- Explored the influence of race concordant visits on each of the four quality measures of PPC
- Indicates which quality of PPC measures require further attention from the provider
- More providers including physicians from minority population
- Training providers to better interact with patients verbally and culturally
- The health system needs to incentivize and give more encouragement to the provision of culturally appropriate and equitable care
- Further investigation - explore the reasons behind the disparity in the quality of PPC by race/ethnicity



**Thank you**  
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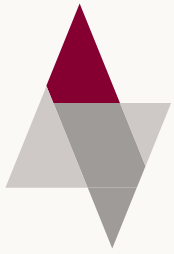
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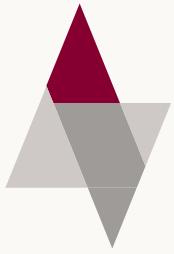
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