Health Literacy, Access to Care, and Patient Satisfaction in a National Sample of Older Americans

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Background

- Well-established link between low health literacy and poor outcomes
- Many studies rely on samples defined by site of care, managed care plan, or a particular chronic condition
- All of these presuppose a connection to the health care system
- What about the effect of low health literacy on access in the general population?

Data: The Health & Retirement Study

- HRS: A cooperative agreement between NIA and the University of Michigan
- Longitudinal bi-annual study started in 1992
- Nationally representative of Americans ages 51+
- New cohorts added every 6 years
- About 22,000 respondents in 2010
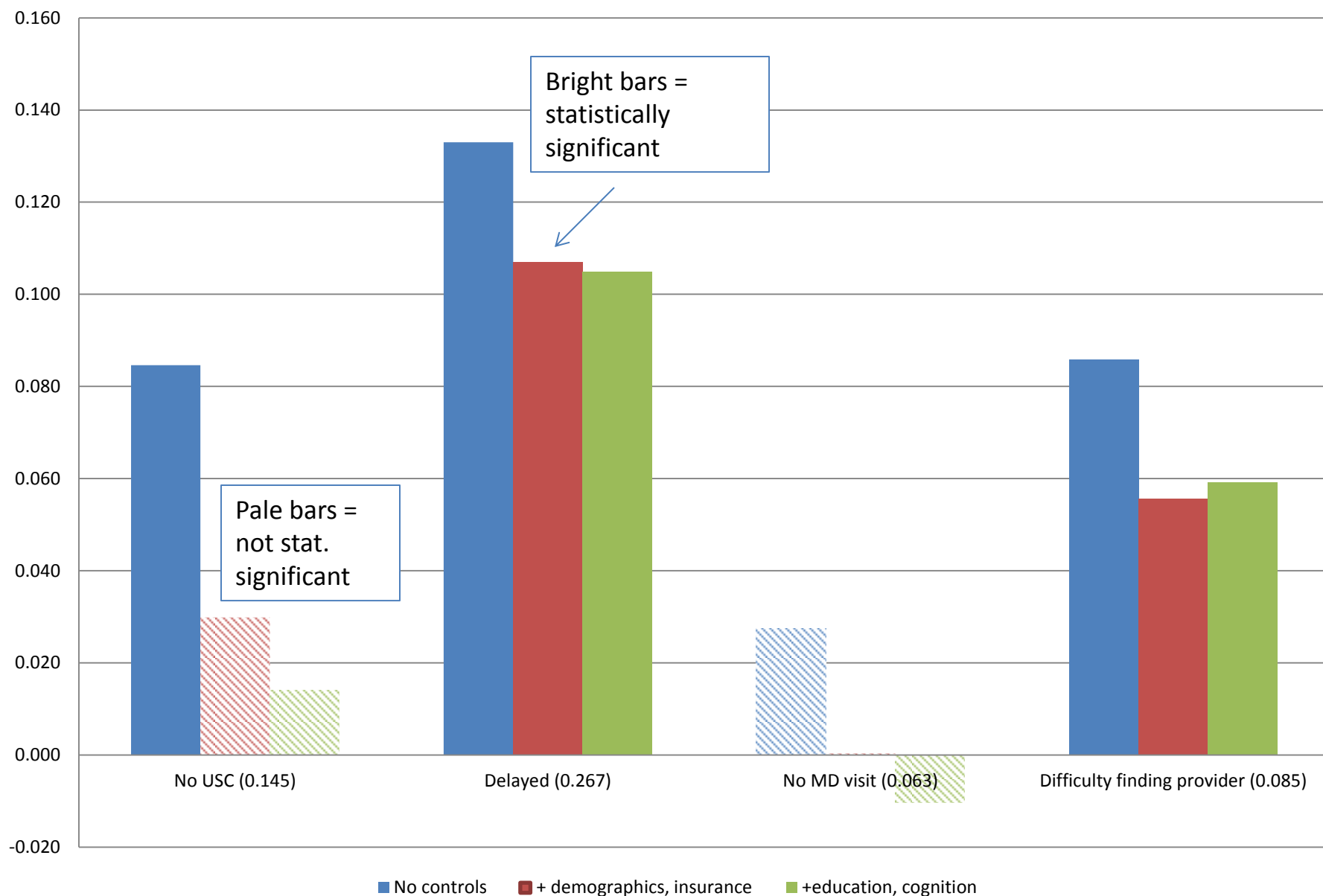- Topics include health, wealth, work, & cognition

Data: HRS mailer on access to care

- Fall 2011: self-administered mail questionnaire ("mailer") sent to about half the HRS sample
  - 75% response rate
  - Sample for analysis: n=7,166
    - 3,900 ages 65+; 3,266 ages 51-64

- Included questions on access to care and self-assessed health literacy (confidence filling out medical forms)
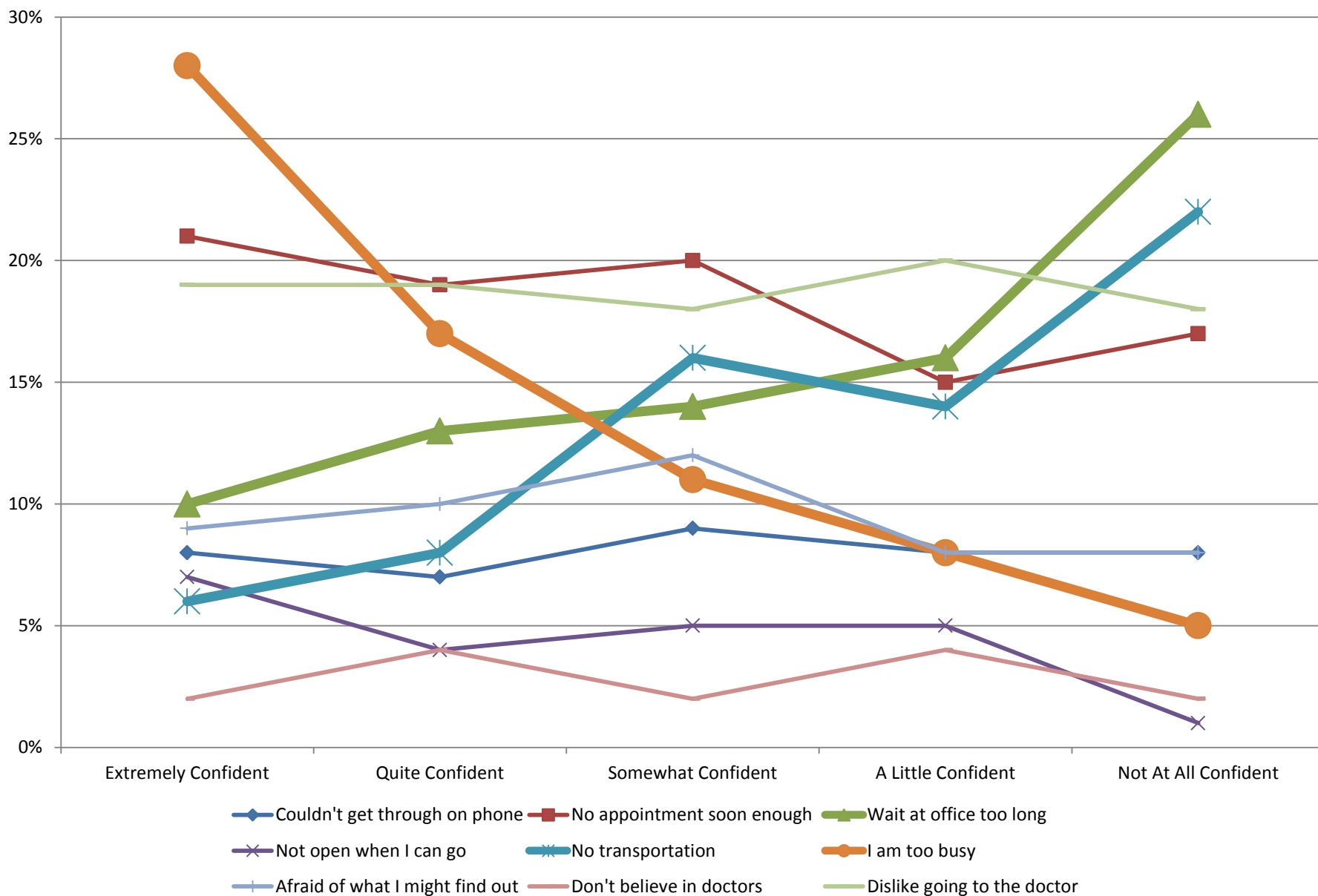
Plan of analysis

- Outcomes
  - No usual source of care
  - Delayed medical care in past year (& reasons)
  - No doctor visits in past year
  - Difficulty finding a provider (& kind of difficulty)
- Key predictor: low self-assessed health literacy (27% of sample)
- Control variables:
  - Age, race/ethnicity, gender, marital status, health insurance
  - Years of education, general cognitive ability (word recall & serial 7s)

Marginal effect of low health literacy on access outcomes: Near elderly

Bright bars = statistically significant

Pale bars = not stat. significant

Legend: ■ No controls ■ + demographics, insurance ■ +education, cognition

Categories: No USC (0.145), Delayed (0.267), No MD visit (0.063), Difficulty finding provider (0.085)

Reasons for delaying medical care, by self-assessed health literacy

Legend:
- Couldn't get through on phone
- No appointment soon enough
- Wait at office too long
- Not open when I can go
- No transportation
- I am too busy
- Afraid of what I might find out
- Don't believe in doctors
- Dislike going to the doctor

Recap of results just shown

- Low health literacy means more delayed care and more difficulty finding a provider
- No effect on Prob(no medical visit) or Pr(usual source of care), once covariates included
- Reasons for delaying care are different. Low health literacy means
  - > more likely to say no transportation or wait at office is too long
  - > less likely to say they are too busy

Other results (not shown)

- Reasons for difficulty finding a provider also vary with health literacy: low health literacy means
  - > Low health literacy means more likely to say "None close by," "No appointments"
  - > No gradient in "Could not get referral", "Not accepting new patients", "Did not accept insurance"
- Satisfaction with doctors & nurses is lower for patients with low health literacy, who are more likely to say:
  - Doctors & nurses don't listen carefully
  - Doctors & nurses don't show respect
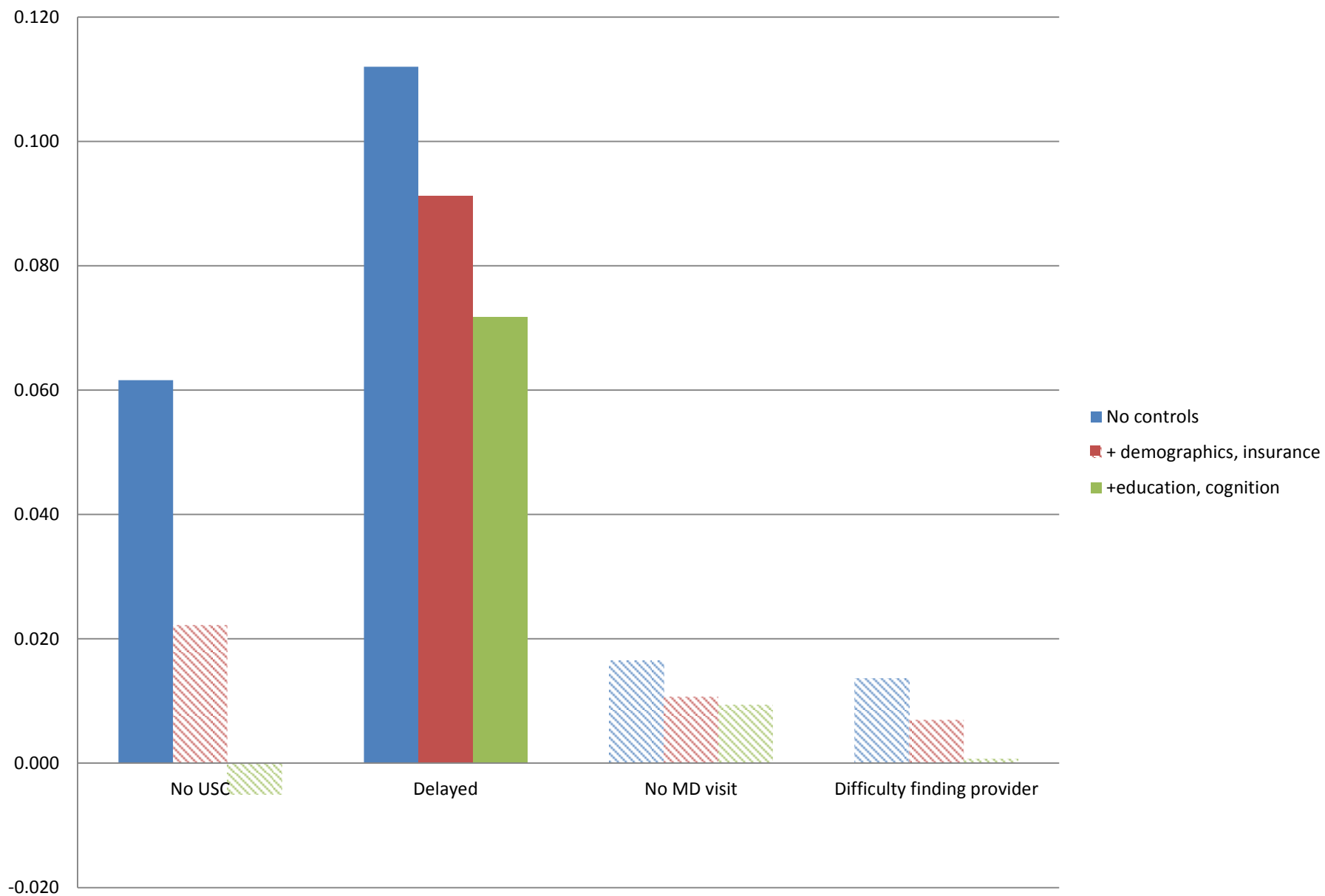 - Doctors & nurses don't spend enough time

Conclusion

- Patients with low health literacy are more likely to report delaying care or having difficulty finding providers
  - These findings are robust to the inclusion of covariates (including general cognition)
- They also have different reasons for delaying
  - Transportation; long wait
- Satisfaction with providers is lower
  - More complaints about communication
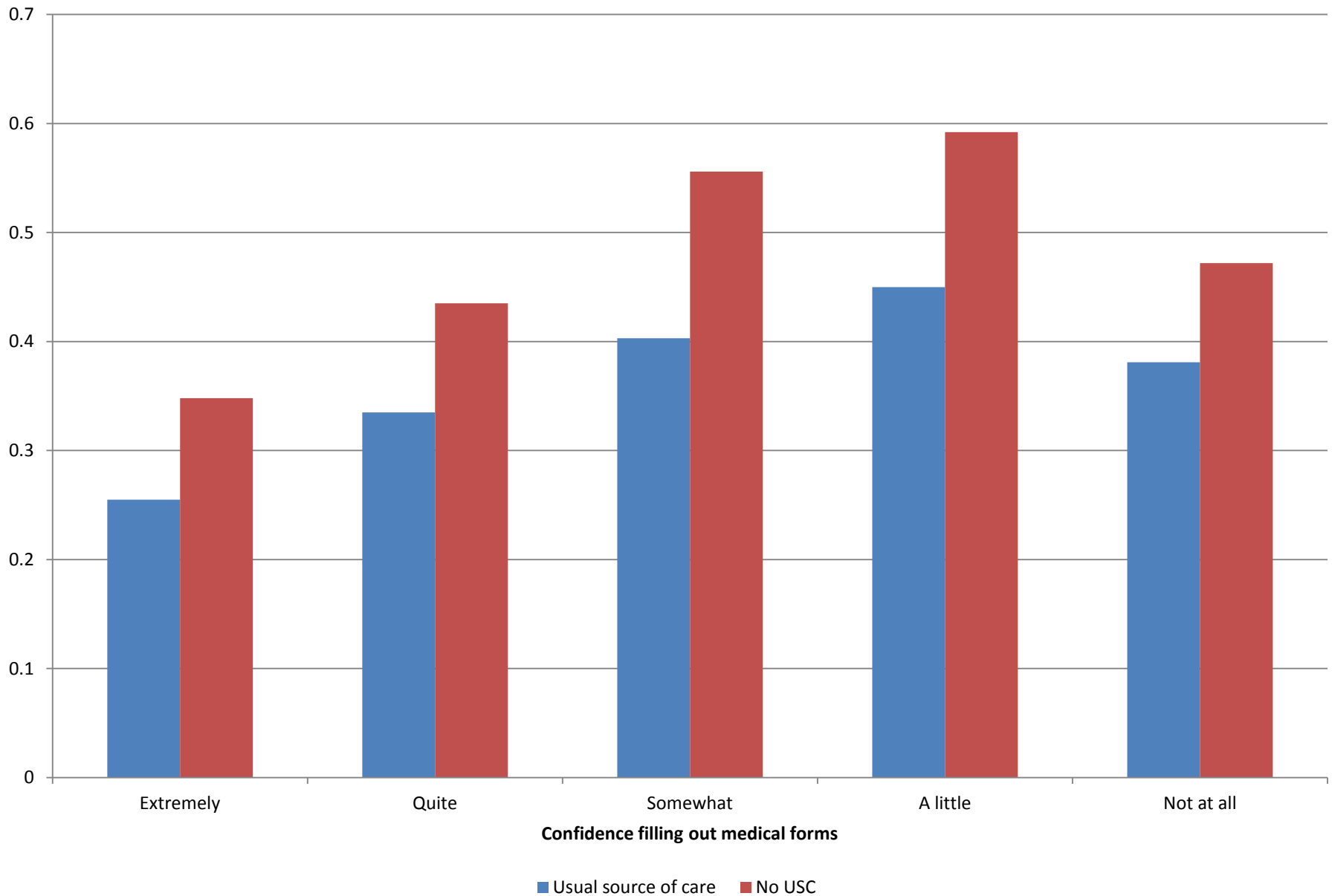
Backup slides start here.

	HRS 2010 core sample, ages 51+			2010 CPS, ages 51+
	Our participants	Core, No Mailer	ALL 2010 core	
Age	64.281	64.321	64.315	64.201
% 65 or Older	0.424*	0.409	0.415	0.423
Female	0.544	0.536	0.539	0.537
Married	0.678*	0.578	0.614	0.629
White, Non-Hispanic	0.82*	0.769	0.787	0.766
Black, Non-Hispanic	0.076*	0.114	0.100	0.099
Other Race, Non-Hispanic	0.029	0.026	0.027	0.051
Hispanic	0.076*	0.091	0.085	0.084
Less Than High School	0.135*	0.166	0.155	0.146
High School	0.326*	0.295	0.307	0.337
Some College	0.242	0.252	0.248	0.242
College	0.292	0.283	0.286	0.274
Region1	0.162*	0.180	0.174	0.191
Region2	0.276*	0.236	0.250	0.222
Region3	0.361*	0.378	0.372	0.366
Region4	0.200	0.204	0.203	0.221
Self-Reported Health Fair/Poor	0.215*	0.269	0.249	0.248
Mean Memory Score (0-20)	9.988*	9.412	9.618	N/A
Serial Sevens score (0-5)	3.674*	3.419	3.510	N/A
Sample N	7,583	14,387	21,970	54,206

*Indicates mean is signficantly different from mean to the right with p<0.05.

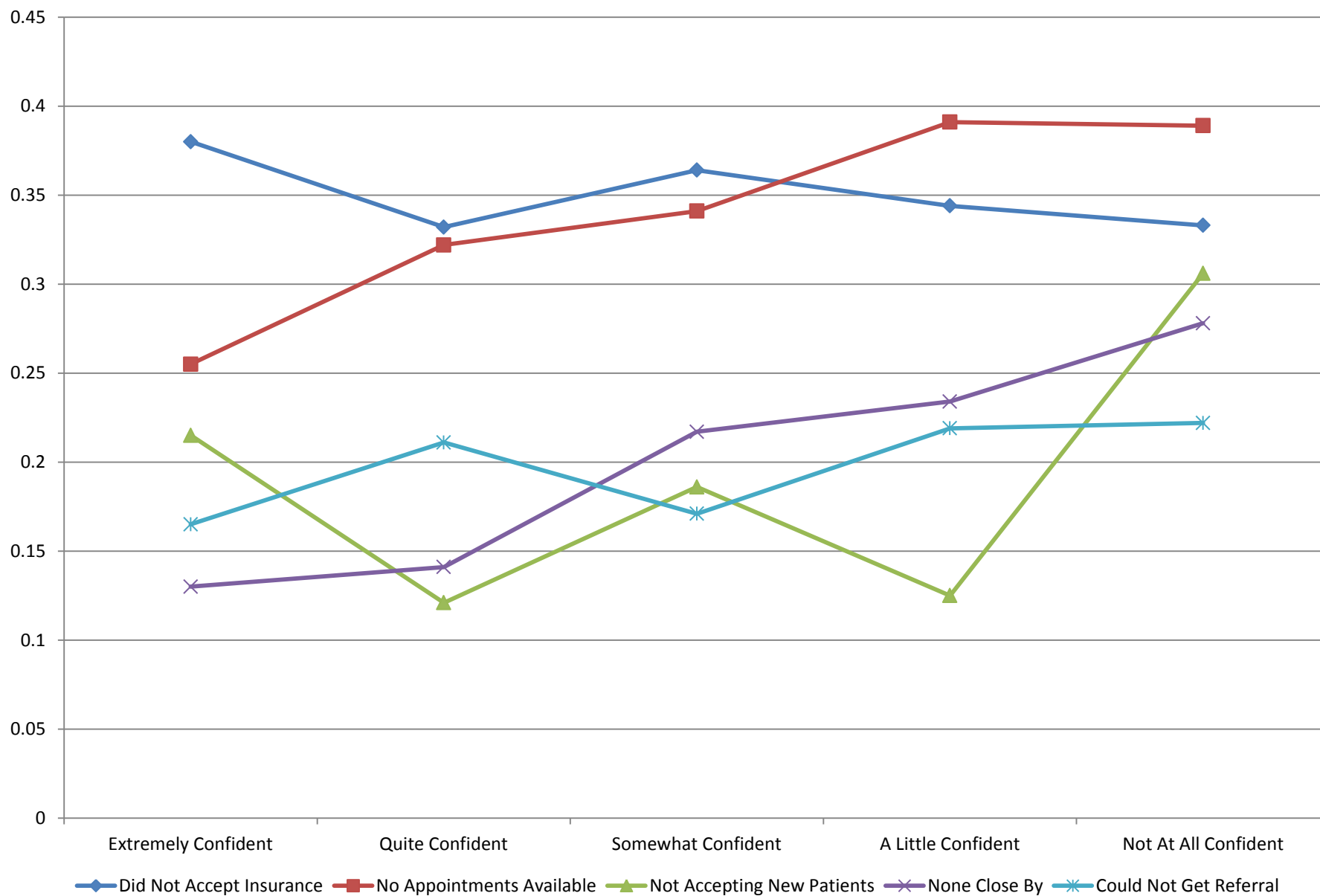# Marginal effect of low health literacy on access outcomes: Near elderly

Fraction who delayed care (ages 55-64)

Confidence filling out medical forms

■ Usual source of care ■ No USC

Reasons for difficulty finding a provider

Legend: Did Not Accept Insurance, No Appointments Available, Not Accepting New Patients, None Close By, Could Not Get Referral

Satisfaction w/doctors & nurses

Legend:
- Doctors & nurses listen carefully
- Doctors & nurses show respect
- Doctors and nurses spend enough time
- How satisfied overall w/doctors & nurses

X-axis categories: Extremely Confident, Quite Confident, Somewhat Confident, A Little Confident, Not At All Confident, Did Not Respond