

Exploring the Impact of Low Health Literacy on Participant Attrition in Clinical Research Studies

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 - ▣ Cognitive Functioning
 - ▣ Age
- Health literacy (HL) has not been examined

Objective

- To explore differences in study retention rates by literacy level across 6 large-scale, federally funded projects

Methods: Study Characteristics

- Convenience sample
- Federally funded (NIH or AHRQ)
- Longitudinal data with ~1 year follow-up
- Include a validated measure of health literacy

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UMS	845 on 2+ meds, 30+	Northern VA	3: 3, 9 mos
MTM	920 with diabetes, 18+	Chicago, IL	3: 6, 12 mos

Methods: Measures

- Interview completion status
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	Low	Marginal	Adequate
TOFHLA	0-59	70-74	75-100
S-TOFHLA	0-53	54-66	67-100
REALM	0-44	45-60	61-66
NVS	0-1	2-4	5-6

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Limited



Results: Patient Characteristics

Study	N	Age		Race/Ethnicity		Education	Health Literacy	
		Mean (SD)	Range	% AA	% H/L	% ≤HS	Measure	% Limited
LitCog	826	63.1 (5.5)	55-74	43	3	27	TOFHLA REALM NVS	30 25 52
CHIRAH	347	30.9 (6.1)	18-41	58	27	50	REALM	32
ABLE	433	67.4 (6.8)	60-98	30	39	52	S-TOFHLA	36
COPD	337	68.1 (8.4)	55-91	44	17	48	S-TOFHLA	31
UMS	842	52.4 (9.2)	30-84	23	50	68	REALM	37
MTM	920	52.3 (9.7)	20-81	87	5	67	NVS	81

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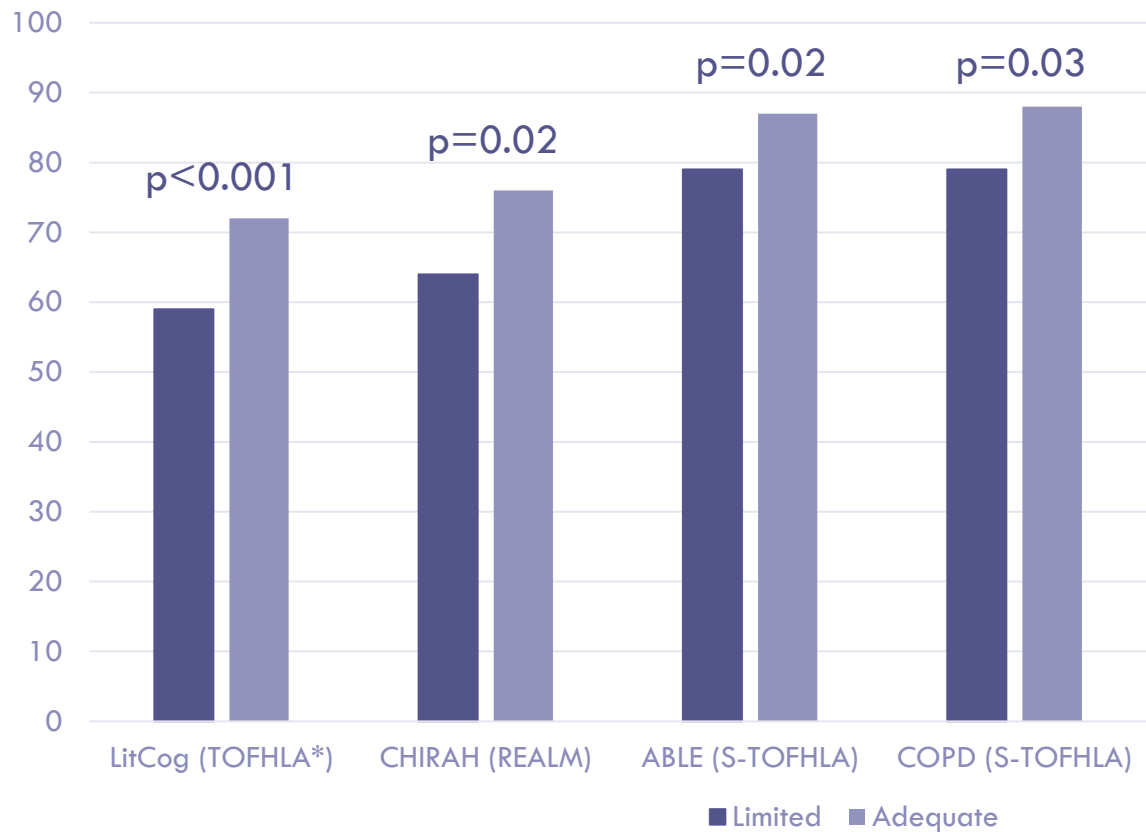
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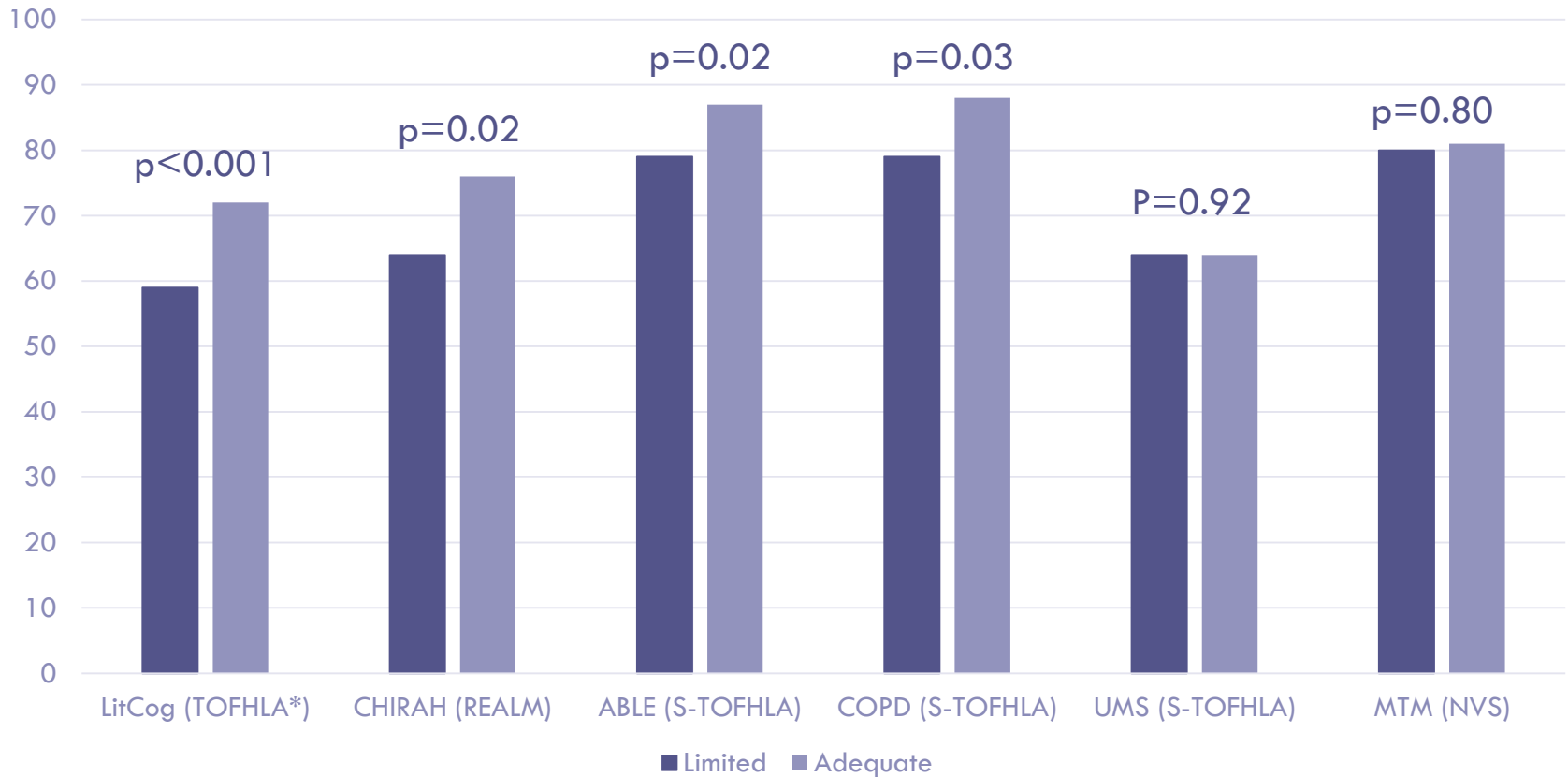
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Proportion with complete interviews by literacy



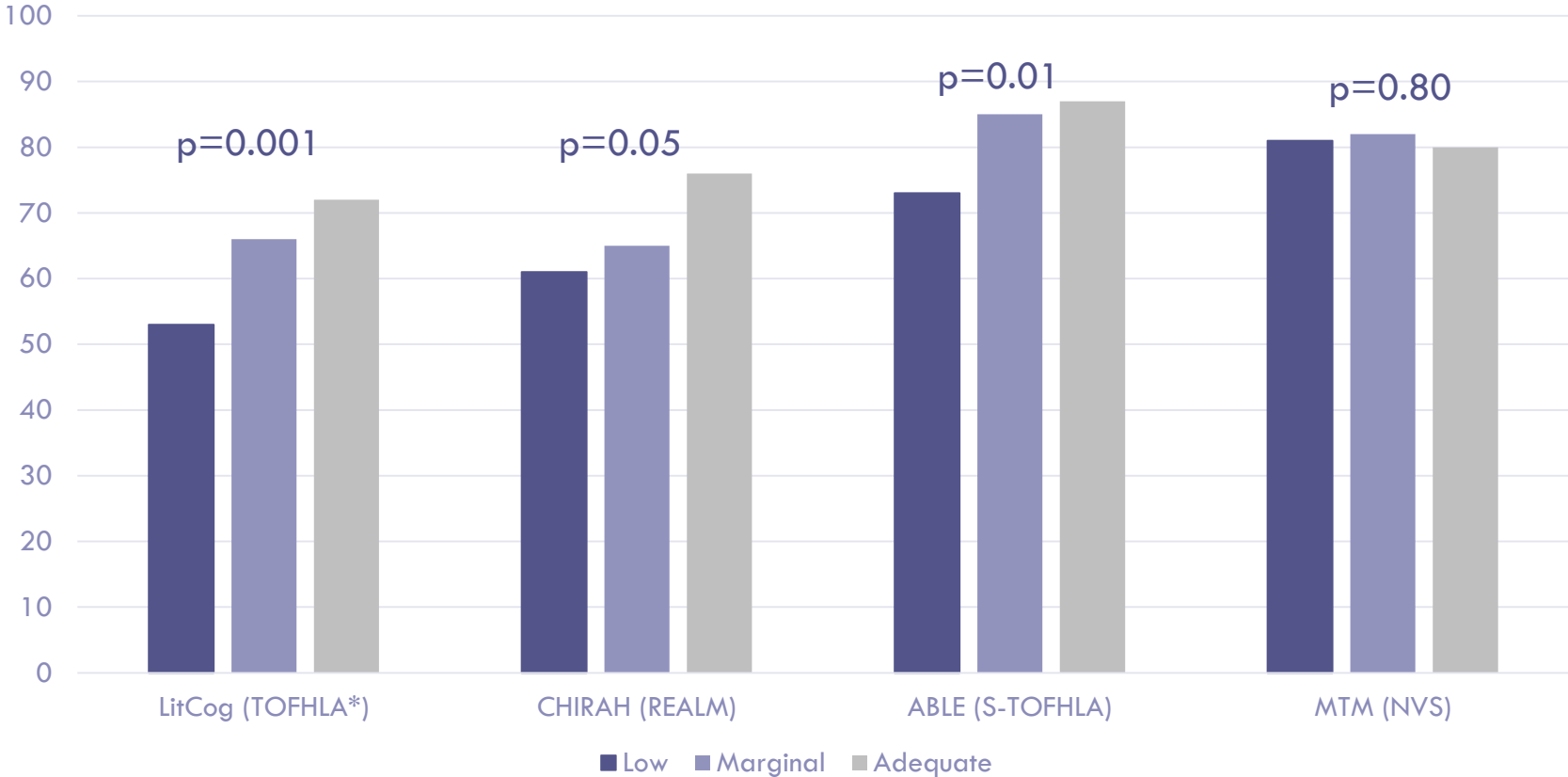
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*Results similar for REALM and NVS

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- Similar attrition rates by literacy level in 2 studies
 - ▣ Randomized controlled trials
 - ▣ Shorter follow-up
 - ▣ 1 high rate of limited literacy

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- Other factors related to health literacy may explain associations

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- Potential strategies exist to prevent dropout
 - ▣ Multiple modes of contact
 - ▣ Update contact information
 - ▣ Periodic communication
 - ▣ Proper incentives

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 - ▣ Inverse Probability Weighting (IPW) (Hernan et.al. 2000, Seaman & White 2011)
 - Applied to attrition (IPAW) (Weuve 2012, Gottesman 2014)

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