Appendix 1.

Review I: Overview of Included Studies

Source	Design (Sample Size)	Population	Health Literacy or Educational Levels	Control	Intervention	Outcomes Category
Relationship Between Literacy and Decision-Making Outcomes						
Arthur et al., 2009 [1]	Cross-sectional (31 patients, 16 resident MDs)	African-American patients in 1 academic primary care office with a discussion about diabetes	45% < 6th grade on REALM	Not Applicable (N/A)	N/A	Level of Participation in Decision
Ciampa et al., 2010 [2]	Cross-sectional	3286 individuals who participated in the national Health Information Technology Survey	23% low objective numeracy by single item from Lipkus numeracy scale. NOTE: Subjective numeracy also assessed, but correlation poor with objective numeracy.	NA	NA	Communication Quality
Dewalt et al., 2007 [3]	Cross-sectional survey (268)	Type II diabetes patients attending a U.S. academic general internal medicine practice for a routine appointment	20% < 7th grade on REALM	N/A	N/A	Desire to Participate in Medical Decision Making, Communication Quality
Hawley et al., 2008 [4]	Cross-sectional (877)	Breast cancer patients from Los Angeles SEER area making a decision about surgical treatment	Subjective health literacy questions adapted from Chew, divided into tertiles of health literacy: 12% lowest tertile	N/A	N/A	Decision Regret, Communication Quality

Hibbard et al., 2007 [5]	Experimental design, although relationship of interest examined in cross-sectional fashion (303)	Community sample of employed-age adults making choices among hospitals	Mean score on objective measure adapted from Lipkus numeracy test = 9.3 (out of 15). S-TOFHLA measured, but scores not reported.	N/A	N/A	Patient Activation
Ishikawa et al., 2009 [6]	Cross-sectional (134 pts; 4 MDs)	Diabetic outpatients attending outpatient University-affiliated hospital metabolic clinic in Japan	Subjective health literacy (HL) questions based on Nutbeam model. Mean Functional HL: 3.4 (range 1.2-4) Mean Communicative HL: 2.5 (range 1-4) Mean Critical HL: 2.0 (range 1-3.5)	N/A	N/A	Question Asking, Participation in Decision Making, Communication Quality
Katz et al., 2007 [7]	Cross-sectional (57 pts; 21 MDs)	Patients attending primary care clinic in Atlanta, U.S.	37% $\leq 6^{th}$ grade level on REALM	N/A	N/A	Questions Asking
Lillie et al., 2007 [8]	Cross sectional (163)	Stage I or II breast cancer patients at a University Breast Center making choices about adjuvant chemotherapy	Mean score on REALM = 63. 12% < 9^{th} grade on REALM	N/A	N/A	Preference for Active Participation in Decision Making
Mancuso and Ricon, 2006 [9]	Cross-sectional survey (175)	English and Spanish speaking asthma patients attending a primary care practice in New York	Functional health literacy on TOFHLA: Adequate: 82% Marginal: 8% Inadequate: 10%	N/A	N/A	Desire to Participate in Treatment Decisions

Martin et al., 2008 [10]	Cross-sectional (628)	628 patients from 5 community rheumatology clinics making a decision about rheumatoid arthritis treatment	Numeracy (4 questions) from DMARD. Knowledge profile: not reported.	N/A	N/A	Decision Confidence
Schillinger et al., 2004 [11]	Cross-sectional (408)	Diabetic patients in family medicine or general medicine clinics at one university hospital	Functional health literacy on S-TOFHLA: inadequate 38%, marginal 11%; adequate 51%	N/A	N/A	Communication Quality
Shone, 2009 [12]	Cross-sectional (499)	Parents and their asthmatic children in NY school district where 40% live in poverty	33% of parents with limited health literacy (<9th grade) on REALM.	N/A	N/A	Communication Quality
Smith et al., 2010 [13]	Cross-section-al (6024)	Individuals who participated in the national Health Information Technology Survey	37% with low subjective numeracy from single item about confidence with medical statistics.	N/A	N/A	Communication Quality
Sudore et al., 2009 [14]	Cross-sectional (771)	Primary care or cardiology patients	51% with limited (inadequate or marginal) health literacy on S-TOFHLA	N/A	N/A	Communication Quality
Sudore et al., 2010 [15]	Cross-sectional (205)	Multiethnic general medicine outpatients at a county hospital making a decision about life support	Functional health literacy on S-TOHFLA: Inadequate: 22% Marginal: 18% Adequate: 60%	N/A	N/A	Decision Uncertainty
Torres and Marks, 2009 [16]	Cross-sectional (106)	106 women recruited from a family clinic and making decisions about hormone replacement therapy	Functional health literacy on S-TOFHLA: Inadequate-46% Marginal-18% Adequate-36%	N/A	N/A	Decision Confidence
Wynia and	Cross-	Patients attending one of	57% had limited health	N/A	N/A	Communication quality

Osborn, 2010 [17]	sectional (2116)	13 heathcare settings (clinic or hospital)	literacy, averaging across 3 Chew subjective health literacy questions.			

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Volandes et al., 2010 [18]	Quasi-exp. (pre-post) (146)	Patients attending urban and suburban primary care clinics in Boston (affiliated with teaching hospitals)	18% $\leq 6^{th}$ grade on REALM 21% grade 7-8 on REALM 61% > 9th grade	N/A	A video of a patient with advanced dementia, depicting the important features of advanced dementia.	Decision Uncertainty

Abbreviations Used:

DMARD: Disease Modifying Anti-Rheumatic Drugs
HL: Health Literacy
MDs: Medical Doctors
REALM: Rapid Estimate of Adult Literacy in Medicine
SEER: Surveillance Epidemiology and End Results
S-TOFHLA: Short-Test of Functional Health Literacy in Adults
TOFHLA: Test of Functional Health Literacy in Adults

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