



Contrasting Measures of Health Insurance Literacy and their Relationship to Health Care Access

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What is health insurance literacy?

- Defined as the extent to which people have access to insurance information and the ability to process and use that information



Why care about health insurance literacy?

- Nationally health insurance coverage increased dramatically
- Health insurance coverage may not translate into access to health care
- Low health insurance literacy likely driver of underuse, particularly for preventive care
- Several measures of health insurance literacy have emerged
 - Motivation: advise state selection of HIL measures

Minnesota Health Access Survey: 2015

- Participants: 11,178 completed interviews
- Fielding period: August through November 2015
- Sample design:
 - 75% cell phone, 25% landline
 - Oversampled pre-paid cell phones
 - Screen for age
- Response rate (AAPOR RR3): 34.6%
 - 29.1% cell, 41.1% landline
- Analysis constrained to **insured adult respondents** answering HIL questions (approximately 4,900)

Measures

- Insured adults **randomly assigned** to health insurance literacy (HIL) measure:
 1. Understanding insurance terminology
(adapted from Health Reform Monitoring Survey)
OR
 2. Proactive use of coverage
(American Institute for Research (AIR), 1 of 4 HILM domains)
- Coverage
 - Public and Private (Group vs Non-Group)
- Controls
 - Health status, age, sex, race, ethnicity, US born, marital status, education, employment status, income, urban/rural

Access measures

- Confidence getting needed care

“How confident are you that you can get the health care you need? Are you...”

1. Very confident, 2. Somewhat confident, 3. A little confident, 4. Not confident at all

- Forgone care due to costs

“During the past 12 months, was there any time that you did (INSERT CHOICE) because of cost?”

1. Yes, 2. No, DK/Refused

- a. Not fill a prescription for medicine
- b. Not get dental care that you needed
- c. Not get routine medical care that you needed
- d. Not get mental or behavioral health care that you needed
- e. Not get specialist care that you needed

Analysis

- Confirm randomization to HIL treatment
- Operationalization of HIL measures into “high” or “low” literacy
- T-tests comparing frequency of “high” literacy by health insurance coverage type
- Logistic regression models using coverage type, self-reported health status, and demographic variables to predict HIL
- Logistic regression models using HIL measures to predict forgone care due to cost and confidence in ability to receive needed care controlling for coverage type, self-reported health status, and demographic variables

RESULTS

Understanding terms (Measure 1)

Some people find health insurance coverage complicated and difficult to understand. I am going to read you a list of health insurance terms, please indicate whether **you** are *confident* or *not confident* in how well you understand what the term means...

Items	%	Aggregate	%
Premium	85%		
Deductible	91%		
Co-payment	94%		
Out-of-pocket maximum	82%	Financial terms	72%
Provider Network	79%	Coverage terms	71%
Open Enrollment	84%	All terms	62%

Being proactive use (Measure 2)

When using your health insurance plan, how likely are you to...

Items	1. Very likely	2. Moder- ately likely	3. Some- what likely	4. Not at all likely
Look to member services to tell you what medical services your health plan covers?	40%	17%	19%	24%
Look into what your health plan will and will not cover before you get health care services?	45%	13%	17%	24%
Review the statements you get from your health plan showing what you owe and what they paid for a service?	70%	10%	10%	10%
Find out if a doctor is in-network before you see them?	53%	11%	14%	22%

Being proactive (Measure 2)

Additive score	%	Aggregate
(Highest Literacy) 4	24%	
5	7%	
6	10%	“High”
7	9%	50%
8	9%	“Low”
9	8%	50%
10	7%	
11	6%	
12	7%	
13	7%	
14	2%	
15	2%	
(Lowest Literacy) 16	3%	

Proportion reporting high literacy by health insurance coverage

Coverage type	Understanding terms	Being proactive
Group	68%	54%*
Non-group	50%^	53%
Public	53%^	46%

*Indicates differences across HIL measures within coverage type

^Indicates differences within HIL by coverage type

Correlates of health insurance literacy measures

	Understanding terms	Being proactive
Public coverage (v. Group)		+
Non-group coverage		
Very good health status (v. Excellent)		
Good health status		+
Fair health status	-	+
Poor health status		+
Age	+	
Sex		-
Non-white		+
Hispanic		
Marriage	+	
US born		
High school graduate (v. less than HS grad)		
At least some college	+	
College graduate	+	
Employment	+	
138 - 249 FPG (v. <138% FPG)		
250 - 399% FPG	+	
400%+ FPG	+	
Urbanicity	-	
Constant	-	
Observations	2,363	2,153

+ or - association $p < .05$ or better; blank indicates non-significance

Odds of being confident in getting needed care

	Understanding terms	Being proactive
Health insurance literacy measure	+	
Public coverage (v. Group)		
Non-group coverage		-
Very good health status (v. Excellent)		
Good health status		
Fair health status	-	-
Poor health status	-	-
Controls for age, sex, race, ethnicity, US born, education, employment status, income, urban/rural residence.		

+ or - association $p < .05$ or better; blank indicates non-significance

Odds of foregone care due to costs

	Understanding terms	Being proactive
Health insurance literacy measure	-	-
Public coverage (v. Group)	+	
Non-group coverage	+	+
Very good health status (v. Excellent)	+	+
Good health status	+	+
Fair health status	+	+
Poor health status	+	+

Controls for age, sex, race, ethnicity, US born, education, employment status, income, urban/rural residence.

+ or - association $p < .05$ or better; blank indicates non-significance

Summary

- Age, marriage, education and income are positively associated with greater confidence in **understanding insurance terms**
- Having public insurance and poorer health status are positively associated with **proactive use** of insurance
- **Understanding terms** is associated with higher confidence in getting needed care and lower odds of forgone care due to cost
- **Proactive use** of insurance is associated with lower odds of forgone care due to cost

Conclusions and next steps

- Both measures have value and capture distinct concepts
- Correlates of HIL vary across the two measures
- Both HIL measures translate into improved access to health care
 - However, proactive use is only significantly associated with foregone care due to costs, not confidence in getting care
- Explore other operationalization of HIL
 - High, medium, low
 - Take a closer look at proactive use items

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