# Health insurance literacy: How best to measure and does it matter to health care access and affordability?

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"…the degree to which individuals have the knowledge, ability, and confidence to find and evaluate information about health plans, select the best plan for their own (or their family's) financial and health circumstances, and use the plan once enrolled" (Consumers Union, 2012).

# What is health insurance literacy?

## What we know:

- US health insurance landscape is complicated

- The use of health insurance to gain access to health care services in the U.S. requires consumer knowledge, ability and understanding – or health insurance literacy (HIL)

- Knowing where to get care and how much it will cost becomes increasingly important as health care costs rise and a greater portion of costs are shifted to consumers
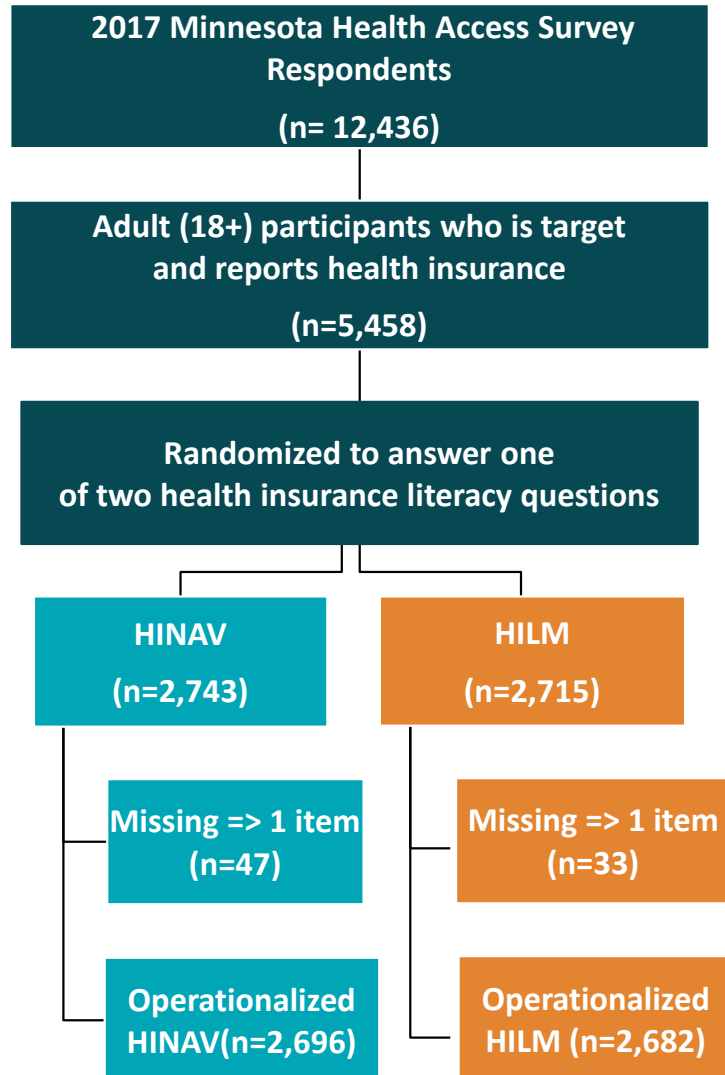
## What we don't know:

- How best to measure HIL

- HIL's relationship to access and affordability

- Contrast two measures of health insurance literacy

  1. Health Reform Monitoring Survey (Urban Institute, 2019) Quarter 1 2016, 7 item health care navigation measure asking about confidence.  Adapted to 4 items

  2. American Institutes for Research's (AIR) Health Insurance Literacy Measure© (HILM) 21 self-report questions assessing self-confidence and behaviors associated with choosing and using health insurance (4 domains).  The measure was validated in a 2013 national survey (Paez et al 2014).

     Use only 4 item "proactive choice" domain, or likelihood of performing tasks

- Examine correlates of each HIL measure

- Explore relationship between HIL and access to care and affordability of care

# Random assignment to compare two HIL measures

2017 Minnesota Health Access Survey Respondents
(n= 12,436)

Adult (18+) participants who is target and reports health insurance
(n=5,458)

Randomized to answer one of two health insurance literacy questions

HINAV
(n=2,743)

HILM
(n=2,715)

Missing => 1 item
(n=47)

Missing => 1 item
(n=33)

Operationalized HINAV(n=2,696)

Operationalized HILM (n=2,682)

**Minnesota Health Access Survey** is a statewide biennial general population telephone survey of health insurance coverage and access in Minnesota

- Comparable data back to 2001, conducted biennially since 2007
- 25% landline, 75% cellphone with prepaid cell phone oversample
- 2017 response rate: 28.8% overall (AAPOR RR3)

Inclusions:

- Adults answering HIL for self, about own coverage
- No missing data on HIL items

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# 1. Likelihood of performing insurance tasks /proactive use (HILM)

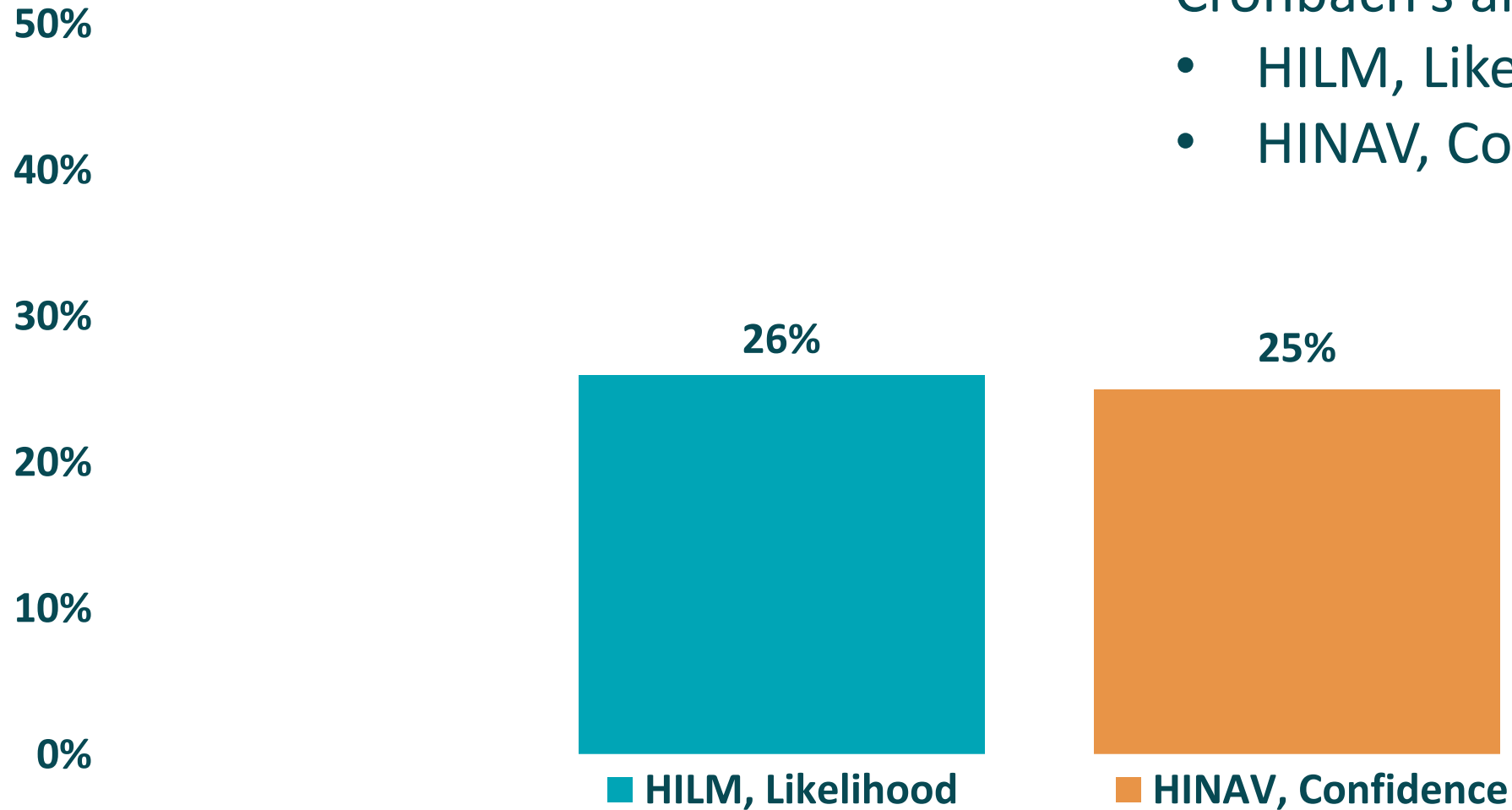**When using your health insurance plan, how likely are you to…**

| Very likely (4) | Moderately likely (3) | Somewhat likely (2) | Not at all likely (1) | Don't Know (0) | Refused (Missing) |
|---|---|---|---|---|---|

**A) Look to member services to tell you what medical services your health plan covers?**

| 37% | 16% | 19% | 27% | 2% | 1% |
|---|---|---|---|---|---|

**B) Look into what your health plan will and will not cover before you get health care services?**

| 46% | 18% | 14% | 20% | 1% | 1% |
|---|---|---|---|---|---|

**C) Review the statements you get from your health plan showing what you owe and what they paid for a service?**

| 74% | 9% | 9% | 6% | | 1% |
|---|---|---|---|---|---|

**D) Find out if a doctor is in-network before you see them?**

| 53% | 9% | 9% | 25% | 2% | 2% |
|---|---|---|---|---|---|

# 2. Confidence in performing insurance tasks (HINAV)

**Some people find health insurance coverage complicated and difficult to use. How confident are you that you can**

| Very confident (4) | Somewhat confident (3) | Not too confident (2) | Not at all confident (1) | Don't Know (0) | Refused (Missing) | |
|---|---|---|---|---|---|---|
| **A) Find a doctor or other health provider who is in your health plan's network?** | | | | | | |
| 67% | | | 25% | 3% | 4% | 1% 1% |
| **B) Figure out whether a service is covered by your plan?** | | | | | | |
| 47% | | 35% | | 10% | 6% | 1% 1% |
| **C) Figure out how much a health care visit or service will cost you?** | | | | | | |
| 38% | | 34% | | 15% | 11% | 2% 1% |
| **D) Figure out which healthcare costs will count toward your health plan's deductible?** | | | | | | |
| 37% | | 36% | | 15% | 7% | 3% 1% |

# Percent reporting high health insurance literacy

Cronbach's alpha
- HILM, Likelihood = .73
- HINAV, Confidence = .74

26% — HILM, Likelihood

25% — HINAV, Confidence

50%
40%
30%
20%
10%
0%

# Demographic correlates of high health insurance literacy



■ Likelihood (HILM)  ■ Confidence (HINAV)

| Category | Value |
|---|---|
| Group coverage (reference: Public) | |
| Individual coverage (reference: Public) | |
| Female | |
| Black (Reference: White) | |
| Asian or Pacific Islander (Reference: White) | 0.54** |
| Other or multi race (Reference: White) | |
| American Indian (Reference: White) | |
| Hispanic (Reference: White) | 0.25*** |
| 31 - 64 years fo age (Reference: 18-30) | |
| 65+ years fo age (Reference: 18-30) | |
| HS graduate (Reference: Less than HS) | 2.57**, 0.50** |
| Some college (Reference: Less than HS) | 2.33** |
| College graduate (Reference: Less than HS) | 2.90*** |
| Employed | |
| 101-200% FPG (Reference 0-99%) | |
| 201-300% FPG (Reference 0-99%) | |
| 301-400% FPG (Reference 0-99%) | |
| 401+% FPG (Reference 0-99%) | |
| Married | 1.79** |
| Parent: Child under 18 in household | |
| Very good health (Reference: Excellent) | |
| Good health (Reference: Excellent) | |
| Fair health (Reference: Excellent) | |
| Poor health (Reference: Excellent) | |
| Unhealthy days | |
| Doctor's visit | |

**p<.05, ***p<.01

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- Usual source of care

  YES to "Is there a regular place that you go for medical care?" and did not provide ER as place
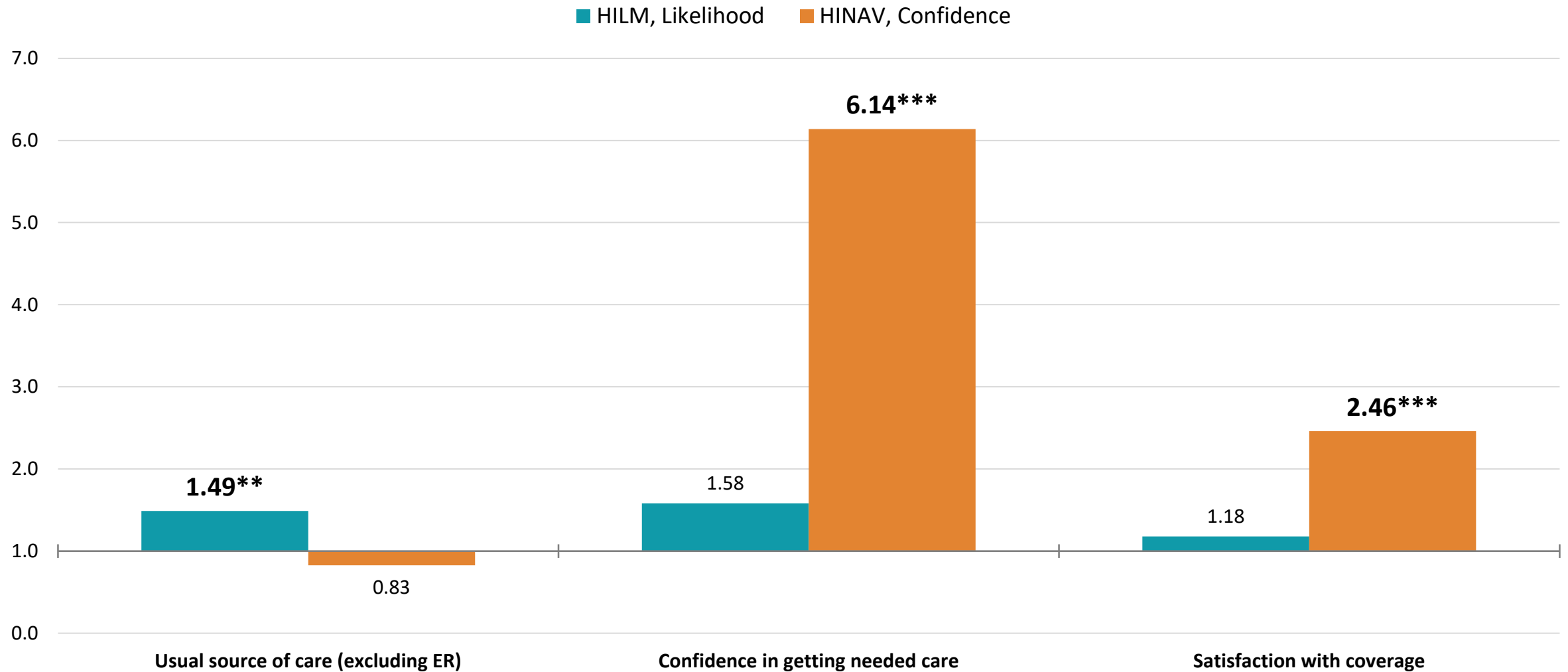
- Confidence in getting needed care

  VERY, SOMEWHAT, A LITTLE versus NOT AT ALL CONFIDENT to "How confident are you that you can get the health care you need?"

- Satisfied with financial protection of coverage

  VERY, SOMEWHAT SATISFIED versus NEITHER SATISFIED OR DISSATISFIED, SOMEWHAT, VERY DISSATISFIED to "How satisfied are you with the protection that your health insurance coverage provides against high medical bills?"

# Health insurance literacy and access to care



**Legend:** ■ HILM, Likelihood  ■ HINAV, Confidence

- Usual source of care (excluding ER): HILM, Likelihood = **1.49\*\***; HINAV, Confidence = 0.83
- Confidence in getting needed care: HILM, Likelihood = 1.58; HINAV, Confidence = **6.14\*\*\***
- Satisfaction with coverage: HILM, Likelihood = 1.18; HINAV, Confidence = **2.46\*\*\***

**p<.05, ***p<.01
Logistic regression controlling for Insurance type, sex, race/ethnicity, age, education, employment, income, marital and parental status, health status and doctor visits.

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- Forgone care due to cost

  YES to "During the past 12 months was there a time that you did [ A-E ] because of cost?"

  A.    Not fill a prescription for medicine (for TARGET)

  B.    Not get dental care that (you/TARGET) needed

  C.    Not get routine medical care that (you/TARGET) needed

  D.    Not get mental or behavioral health care that (you/TARGET) needed
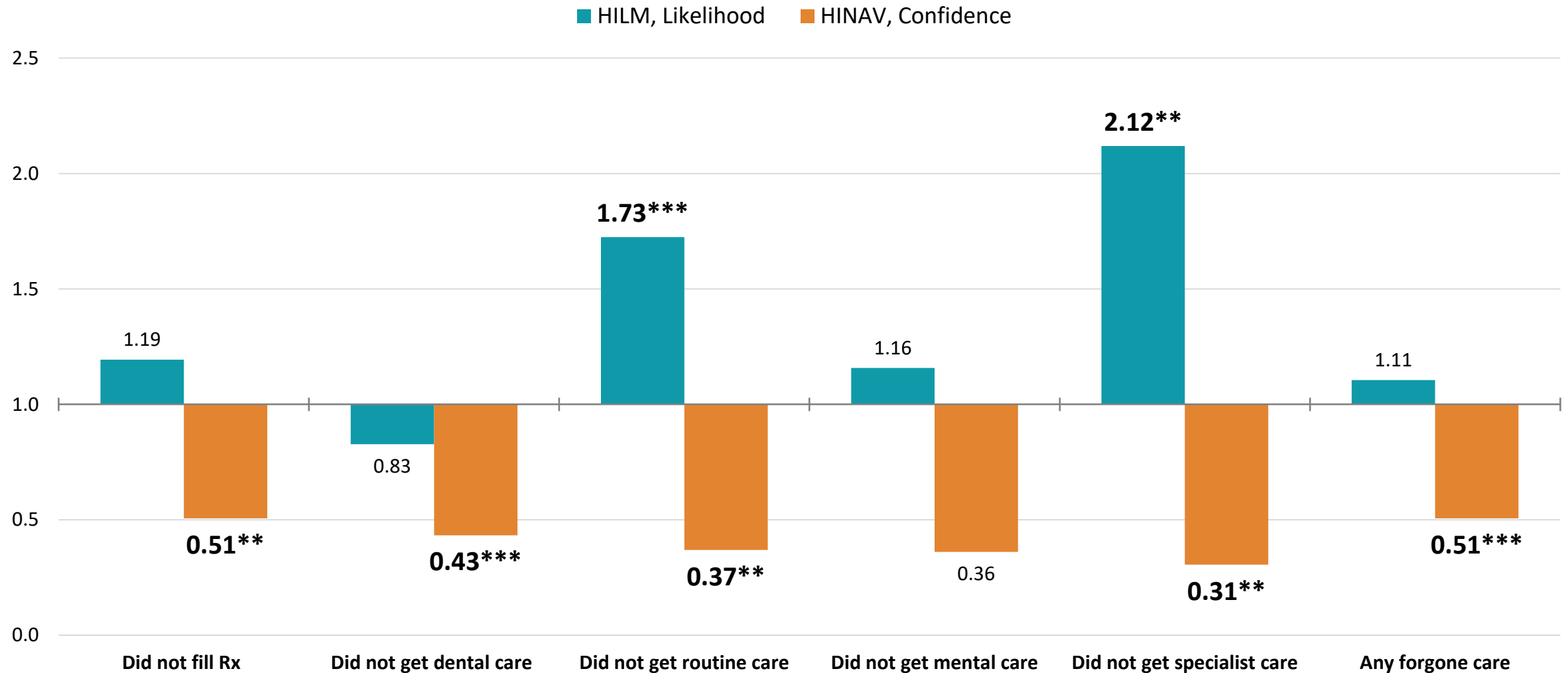
     (IF NEEDED: Mental and behavioral health providers include counselors, psychologists and psychiatrists)

  E.    Not get specialist care that (you/TARGET) needed

     (IF NECESSARY: Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors and others who specialize in one area of health care.)

- ANY forgone care due to cost if YES to any A-E

# Health insurance literacy and affordability

**■ HILM, Likelihood    ■ HINAV, Confidence**

- Did not fill Rx: HILM 1.19, HINAV **0.51****
- Did not get dental care: HILM 0.83, HINAV **0.43*****
- Did not get routine care: HILM **1.73*****, HINAV **0.37****
- Did not get mental care: HILM 1.16, HINAV 0.36
- Did not get specialist care: HILM **2.12****, HINAV **0.31****
- Any forgone care: HILM 1.11, HINAV **0.51*****

**p<.05, ***p<.01
Logistic regression controlling for Insurance type, sex, race/ethnicity, age, education, employment, income, marital and parental status, health status and doctor visits.

- Any problems paying medical bills

    YES to "During the past 12 months, were there times when you had problems paying or were unable to pay any of your medical bills?"
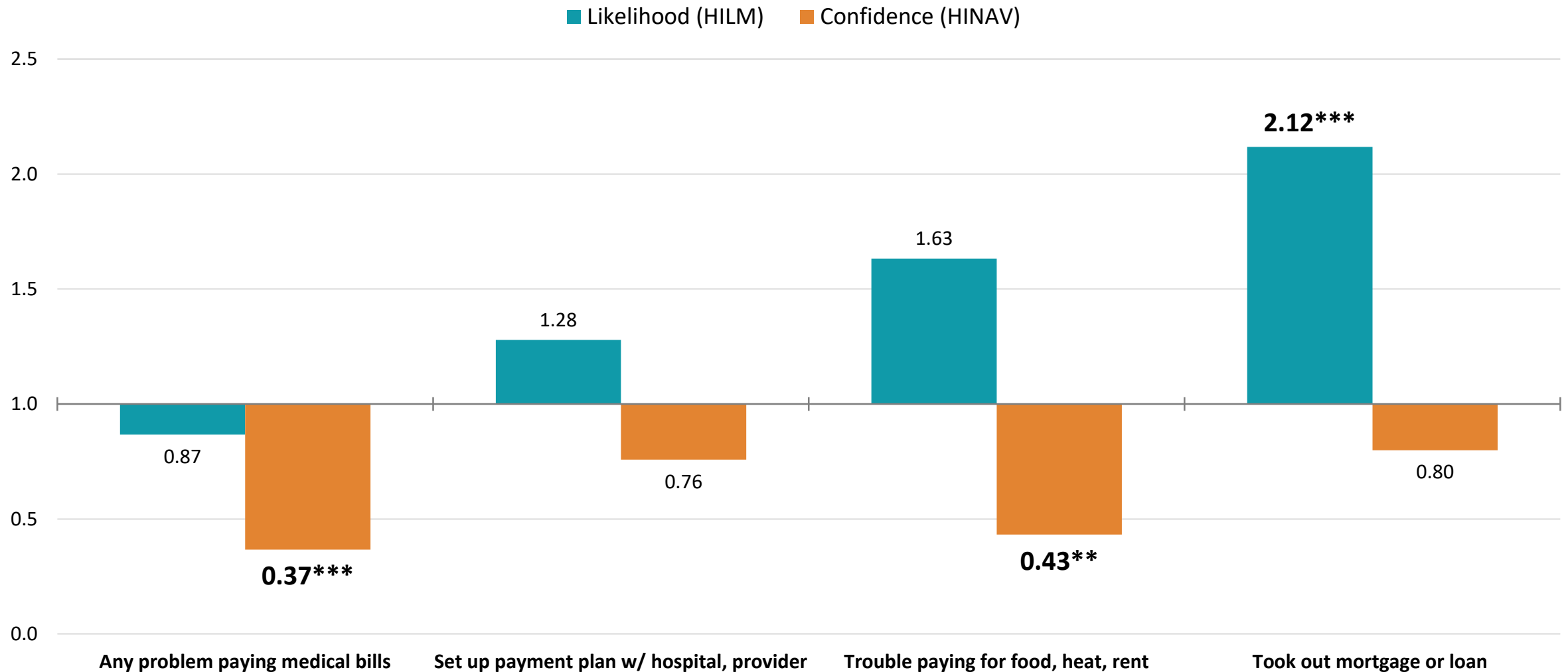
- Specific problems paying medical bills

    YES to "During the past 12 months, did you [ A-C ]:"

    A.    have to set up a payment plan with a hospital or doctor's office?

    B.    have trouble paying for other basic bills like food, heat, or rent because of medical costs for (you/TARGET)?

    C.    have to take out a mortgage or a loan, including loans from family members, because of medical bills?

    (IF NECESSARY: Because of TARGET's Medical Bills only)

# Health insurance literacy and financial burden



**Legend:** ■ Likelihood (HILM)  ■ Confidence (HINAV)

Any problem paying medical bills: HILM 0.87, HINAV **0.37***
Set up payment plan w/ hospital, provider: HILM 1.28, HINAV 0.76
Trouble paying for food, heat, rent: HILM 1.63, HINAV **0.43***
Took out mortgage or loan: HILM **2.12***, HINAV 0.80

**p<.05, ***p<.01
Logistic regression controlling for Insurance type, sex, race/ethnicity, age, education, employment, income, marital and parental status, health status and doctor visits.

- For both measures about 25% of adults report high health insurance literacy

  - Reports of confidence and likelihood/proactive use; not actual knowledge of plan

- Correlates vary across measures of HIL

  - Generally those with higher education and life circumstances associated with use of health care (marital and parental status) report great confidence and likelihood of performing insurance tasks

  - Health status and reports of use are <u>not</u> associated with HIL

- Relationship with access is in expected direction and similar across HIL measures

- Relationship with affordability and financial burden varies across HIL measures

  - Confidence measure is associated with lower reports of forgone care due to costs and lower financial burden. Opposite is true for likelihood measure

- HIL is generally low; disconcerting given rising out of pocket costs

- HIL measures behave differently; appear to be capturing somewhat different concepts

- How to decide which HIL measure is better?

  - General feeling of confidence in use of health insurance to reporting access to and affordability of care

  - Reports of likely proactive attention to benefits before seeking care

## Authors

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# THANK YOU!

Kathleen Call

# Minnesota Health Access Survey methods

- General population telephone survey (English and Spanish)
- Comparable data back to 2001, conducted biennially since 2007

2017 Stats:

- 12,436 completed interviews
- Fielding period: June through early October 2017
- Sample design:
  - 75% cell phone/25% landline
  - Screening for age
  - Oversampled pre-paid cell phones
- Response rate: Overall: 28.8%
- Weighted to MN population using 2016 American Community Survey (ACS)