Examining the Validity of Clinical Social Risk Screening Tools

SIREN Webinar

July 18, 2019
Examining the Validity of Clinical Social Risk Screening Tools

Moderator:
Yuri Cartier, MPH
Research Associate
Social Interventions Research and Evaluation Network (SIREN)
University of California, San Francisco (UCSF)

With our thanks to: pcorni®
• We are recording this webinar. The recording and slides will be available on the SIREN website (sirenetwork.ucsf.edu) next week.

• Submit questions and technical issues via the chat function.
Social Interventions Research & Evaluation Network

SIREN’s mission is to catalyze and disseminate high quality research that advances health care sector efforts to improve health equity by addressing social risks.

Catalyze & conduct high quality research

Provide evaluation, research & analytics consultation services

Collect & disseminate research findings

siren

sirennetwork.ucsf.edu | siren@ucsf.edu | @SIREN_UCSF
Today’s speakers

Nora Henrikson, PhD, MPH
Assistant Investigator
Kaiser Permanente Washington
Health Research Institute

Richard Sheward, MPP
Director of Innovative Partnerships
Children’s HealthWatch
• We are recording this webinar. The recording and slides will be available on the SIREN website (siren network.ucsf.edu) next week.

• Submit questions and technical issues via the chat function.
Evaluating multidomain tools for screening social risk in health care settings

Nora Henrikson PhD MPH
Kaiser Permanente Washington Health Research Institute
SIREN Webinar July 18 2019
Study team

Nora B. Henrikson, PhD, MPH
Paula Blasi, MPH
Caitlin N. Dorsey
Kayne D. Mettert
Matthew Nguyen, MPH
Callie Walsh-Bailey, MPH
Jennifer Macuiba, MS
Laura M. Gottlieb, MD, MPH
Cara C. Lewis, PhD

These authors attest they have no conflicts of interest to report.

Funding: KPWHRI Director Development Fund
Benefits of screening: example

Context

- Screening for social risk could improve health outcomes by identifying and intervening on risk
- Increasing interest in clinic-based screening
- Generating evidence for the impact of screening requires high-quality screening tools
High quality screening tools are needed to develop evidence on the benefits of screening for social risk.

- Tool development
- Psychometric properties
- Pragmatic properties

Screening for social risk → Detect actionable social risk → Address actionable social risk → Improved social risk → Improved health outcomes

Harms of screening → Harms of intervention
An ideal screening tool

<table>
<thead>
<tr>
<th>Psychometrically strong</th>
<th>Easy to use in practice (pragmatic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Accurately and precisely measures social risk domains (validity)</td>
<td>• Brief</td>
</tr>
<tr>
<td>• Measures changes in social risk over time and repeated measure (reliability)</td>
<td>• Easy to administer and score</td>
</tr>
<tr>
<td>• Developed using gold standard processes</td>
<td>• Free or low cost</td>
</tr>
</tbody>
</table>
Objective: To evaluate the current state of multidomain tools intended for screening social risk in health care settings

Research questions

1. To what degree have gold standard methods been used to develop multidomain social risk screening tools?
2. What is the available psychometric evidence for social risk screening and tracking tools?
3. What is the available pragmatic evidence for social risk screening tools?
4. What is the relation between psychometric and pragmatic evidence?
Methods

• Systematic review
  • Manual searching to identify examples of empiric uses

• PubMed and CINAHL
  • 2000 to May 18, 2018

• Included:
  • U.S. based
  • Measured ≥2 social risk domains
  • Intended for use in clinical settings

• Data abstracted:
  • Study information
  • Steps in tool development
  • Psychometric properties
  • Pragmatic properties
We included these six social risk domains

**Economic stability:**
employment, income, expenses, debt, medical bills, support

**Education:**
early childhood education, high school graduation, higher education, language, literacy / health literacy, vocational training

**Social & community context:**
discrimination, incarceration, social integration, support systems / loneliness, community engagement, immigration/refugee status

**Health & clinical care:**
access to health care/primary care, health coverage, provider availability, provider linguistic & cultural competency, quality of care

**Neighborhood & physical environment:**
safety, crime, violence, environmental conditions, housing quality / stability, transportation, parks, playgrounds, walkability

**Food:**
Hunger/food insecurity, access to healthy options
We abstracted evidence on use of these gold standard steps of measure development:

1. defining the construct
2. generating initial questions using a group of experts
3. pilot testing with a representative sample
4. testing of validity and reliability based on pilot testing
5. refining of instrument based on pilot results
6. administration of refined instrument to target sample
7. performing of validity and reliability tests
8. reporting of psychometric properties
We rated the psychometric and pragmatic properties using the PAPERs scale (Lewis)

| Psychometric properties | | Pragmatic properties |
|-------------------------|------------------------|
| Possible overall score: | Possible overall score: | • cost |
| -9 (low) to 36 (high quality) | -5 (least) to 20 (most) pragmatic |
| • internal consistency | • accessibility of language |
| • convergent validity | • assessor burden (training) |
| • discriminant validity | • assessor burden (interpretation) |
| • known-groups validity | • length |
| • predictive validity | | |
| • concurrent validity | | |
| • structural validity | | |
| • responsiveness | | |
| • norms | | |
## Psychometric properties

<table>
<thead>
<tr>
<th>Construct</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability – internal consistency</td>
<td>Whether several items that purport to measure the same construct produce similar scores in the same test</td>
</tr>
<tr>
<td>Construct validity – convergent</td>
<td>Degree to which two constructs that are theoretically related are in fact related</td>
</tr>
<tr>
<td>Construct validity – discriminant</td>
<td>Degree to which two constructs that are theoretically distinct are in fact distinct</td>
</tr>
<tr>
<td><strong>Construct validity – known-groups</strong></td>
<td>Distinct groups with differing characteristics can be differentiated</td>
</tr>
<tr>
<td><strong>Criterion validity – predictive</strong></td>
<td>Refers to the degree to which a measure can predict or correlate with an outcome of interest measured at some point in the future</td>
</tr>
<tr>
<td>Criterion validity – concurrent</td>
<td>Whether two measurements taken at the same time are correlated, and how the measure under consideration compares to an established measure of the same construct</td>
</tr>
<tr>
<td>Dimensionality – structural validity</td>
<td>Degree to which all test items rise and fall together (aka “test structure”)</td>
</tr>
<tr>
<td><strong>Responsiveness</strong></td>
<td>Measure’s ability to detect clinically important changes in the construct over time</td>
</tr>
<tr>
<td>Norms</td>
<td>Measured by sample size, means, and standard deviations of measures; meant to assess generalizability</td>
</tr>
</tbody>
</table>
We judged these three psychometric properties as particularly relevant to social risk

<table>
<thead>
<tr>
<th>Construct</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Construct validity – known-groups</td>
<td>Distinct groups with differing characteristics can be differentiated</td>
</tr>
<tr>
<td>*Criterion validity – predictive</td>
<td>Degree to which a measure can predict or correlate with an outcome of interest measured at some point in the future</td>
</tr>
<tr>
<td>*Responsiveness</td>
<td>Detects clinically important changes in the construct over time</td>
</tr>
<tr>
<td>Construct</td>
<td>Definition</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Reliability – internal consistency</td>
<td>Whether several items that purport to measure the same construct produce similar scores in the same test</td>
</tr>
<tr>
<td>Construct validity – convergent</td>
<td>Degree to which two constructs that are theoretically related are in fact related</td>
</tr>
<tr>
<td>Construct validity – discriminant</td>
<td>Degree to which two constructs that are theoretically distinct are in fact distinct</td>
</tr>
<tr>
<td>Criterion validity – concurrent</td>
<td>Whether two measurements taken at the same time are correlated, and how the measure compares to an established measure of the same construct</td>
</tr>
<tr>
<td>Dimensionality – structural validity</td>
<td>Degree to which all test items rise and fall together (aka “test structure”)</td>
</tr>
<tr>
<td>Norms</td>
<td>Measured by sample size, means, and standard deviations of measures; meant to assess generalizability</td>
</tr>
</tbody>
</table>
Results

21 unique tools met inclusion criteria

7733 Records identified through PubMed & CINAHL

6838 Records screened after duplicates

6494 Records excluded after review of title & abstract

353 Full-text articles assessed for eligibility

318 Full-text articles excluded

Reasons for exclusion:
2 Not relevant
40 Not original research
9 Ineligible setting
11 Ineligible population
59 Ineligible country
175 Ineligible screening
10 Ineligible outcomes
7 Ineligible study design
5 Irretrievable

21 unique tools included

27 Records included from hand searches

60 records included as empiric uses of included tools
Results – overview of included tools

- 3-6 domains assessed (median 4)
  - Neighborhood / physical environment (21/21)
  - Economic risk (19/21)

- Adult and pediatric populations

- Administered in ambulatory care (19/21)

- Median 3 empiric uses
Results – Increasing tools over time
## Included tools (21)

<table>
<thead>
<tr>
<th>Accountable Health Communities Health-Related Social Needs (AHC-HRSN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Begins</td>
</tr>
<tr>
<td>Health Leads</td>
</tr>
<tr>
<td>HelpSteps (Online Advocate)</td>
</tr>
<tr>
<td>Income, Housing, Education, Legal Status, Literacy, Personal Safety (IHELLP) Questionnaire</td>
</tr>
<tr>
<td>Institute of Medicine (IOM)</td>
</tr>
<tr>
<td>Legal Checkup</td>
</tr>
<tr>
<td>Medical-Legal Partnership (MLP)</td>
</tr>
<tr>
<td>Partners in Health Survey</td>
</tr>
<tr>
<td>Protocol for Responding to and Assessing Patient Assets, Risks, and Experiences (PRAPARE)</td>
</tr>
<tr>
<td>Safe Environment for Every Kid (SEEK)</td>
</tr>
<tr>
<td>Social History Template</td>
</tr>
<tr>
<td>Social Needs Checklist</td>
</tr>
<tr>
<td>Structural Vulnerability Assessment Tool</td>
</tr>
<tr>
<td>Survey of Well-being of Young Children (SWYC)</td>
</tr>
<tr>
<td>Total Health Assessment Questionnaire for Medicare Members</td>
</tr>
<tr>
<td>Urban Life Stressors Scale (ULSS)</td>
</tr>
<tr>
<td>WeCare</td>
</tr>
<tr>
<td>Well Rx</td>
</tr>
<tr>
<td>Women's Health Questionnaire</td>
</tr>
<tr>
<td>Your Current Life Situation (YCLS)</td>
</tr>
</tbody>
</table>
1. To what degree have gold standard methods been used to develop multi-domain social risk assessment tools?

- No tool reported following all 8 steps of gold standard measure development.
- 18/21 used at least one step (median 2, range 0-7)
- 8/21 reported some reliability or validity testing
- 15/21 reported modifications from original
  - Dropping / adding / changing items; modifying response options
2. What is the available psychometric evidence for social risk screening tools?

• Very little psychometric evidence for the 21 included tools
• No data on discriminant validity, known-groups validity, structural validity, or responsiveness
• Most commonly available evidence was on norms (15/21 tools)
• PAPERS psychometric score -1 to 9 (mode: 2),
  • all included tools in the lowest quartile of possible scores
### Psychometric properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Known-groups validity (distinct groups with differing characteristics</td>
<td>No data</td>
</tr>
<tr>
<td>can be differentiated)</td>
<td></td>
</tr>
<tr>
<td>Predictive validity (measure can predict or correlate with an outcome</td>
<td>3 studies reporting: all low</td>
</tr>
<tr>
<td>of interest)</td>
<td></td>
</tr>
<tr>
<td>Responsiveness (measure’s ability to detect clinically important</td>
<td>No data</td>
</tr>
<tr>
<td>changes in the construct it measures over time)</td>
<td></td>
</tr>
</tbody>
</table>
3. What is the available pragmatic evidence for social risk screening tools?

- Pragmatic evidence available 20/21 tools
- 14/20 in public domain
- 14/20 written in accessible language (13 at 8th grade reading level)
- Limited evidence for ease of training (4/21) and scoring (7/21)
- 5/21 contained 1-10 items (median 21 items)
- PAPERS score range -1 to 20
  - 11/21 in top two quartiles
4. What is the relation between psychometric and pragmatic evidence for social risk screening tools?

- Given the lack of psychometric evidence, it was not possible to sufficiently assess the relationship between pragmatic and psychometric evidence.
Discussion

• Many new multi-domain tools have been developed in the last 5 years
• Pragmatic assessments show that many tools have favorable readability, are low-cost and easily administered
• Very little psychometric information available
• Majority of tools modified from original
• At present, there appear to be no social risk screening tools designed to:
  a) accurately and differentially identify risk between known groups in a clinical setting
  b) accurately detect changes in risk over time
  c) measure the impacts of an intervention
  d) Measurement work may be underway
Limitations

• Focus on U.S. settings
• Focus on tools developed for clinical settings
• Intended as a single point in time review of already published work
Future work

• The lack of data about measure development or psychometric properties limits the utility of screening tools.

• Research establishing tools’ measurement properties could provide a strong foundation for observational and intervention research on identifying and responding to patients’ social risks in clinical settings.

• Only adapt existing tools when necessary, provide documentation.

• This review could be considered a benchmark for future progress.
For more information

- View our results: https://sdh-tools-review.kpwashingtonresearch.org/
- SIREN https://sirenetwork.ucsf.edu/
- AJPM publication (under review)
Thank you

Nora.B.Henrikson@kp.org
@norahenrikson
EXAMINING THE EVIDENCE: THE HUNGER VITAL SIGN™ AND THE HOUSING STABILITY VITAL SIGN™

Richard Sheward, MPP
Director of Innovative Partnerships
Children’s HealthWatch
Disclosures

I have no relevant financial relationships to disclose or conflicts of interest to resolve.
Roadmap

About Children’s HealthWatch

1. The Hunger Vital Sign™
   ◦ Validation study
   ◦ Subsequent studies and implementation

2. The Housing Stability Vital Sign™
   ◦ Conceptual definition
   ◦ Housing instability study and implementation
Founded: 1998

Non-partisan, pediatric research and policy network

Collect data in urban hospitals across the country on infants and toddlers from families facing economic hardships

Improve health & development of young children → alleviate economic hardships → inform public policies

Provide policy makers with evidence from the frontlines of health care to develop policies that protect young children’s health and development
Improving the health and development of young children by informing policies that address and alleviate economic hardships

SINCE OUR LAUNCH IN 1998,

PEER REVIEWED JOURNAL ARTICLES 43+

Our researchers have made landmark contributions to the understanding of how public policies and economic hardships impact children's health

65K+ FAMILIES

We have interviewed more than 65,000 caregivers of young children under 4 years of age in pediatric emergency rooms and clinics

A nonpartisan network of pediatricians, public health researchers & policy experts, we bring data & analysis from the front lines of care in Boston, Baltimore, Philadelphia, Little Rock & Minneapolis

Leveraging the perspective of pediatricians, our research and testimony has improved public policies (nutrition, housing, anti-poverty) and practices that give all children equal opportunities for healthy, successful lives

20 YEARS
Development and Validity of a 2-Item Screen to Identify Families at Risk for Food Insecurity


Study design

We sought to develop a food insecurity screen from the “gold standard” USDA Household Food Security Survey (HFSS) with five specific characteristics:

(1) applicable to families with young children
(2) brief
(3) highly sensitive (90%)
(4) specific (80%)
(5) valid (convergent validity)
Which questions?

Most common affirmatively answered questions with best sensitivity/specificity compared to “gold standard” (USDA HFSS)

• First two questions

The Hunger Vital Sign™ identifies individuals and families as being at risk for food insecurity if they answer that either or both of the following two statements is ‘often true’ or ‘sometimes true’ (vs. ‘never true’):

“Within the past 12 months we worried whether our food would run out before we got money to buy more.”

“Within the past 12 months the food we bought just didn’t last and we didn’t have money to get more.”
Why two questions and not one?

• Cross-tabulation tables were generated for combinations of the first two questions of the HFSS to examine sensitivity and specificity.

• Four combinations were explored.

• An affirmative response to question one only or question two only of the HFSS provided a sensitivity of 93% or 82% and a specificity of 85% or 95%, respectively.

• Because an affirmative response to question one and/or question two of the HFSS provided the highest **sensitivity (97%)** and **specificity (83%)**; these are the criteria that comprise the HVS.
Adjusted logistic regression models were conducted by using both the HFSS and the HVS (separately) to examine how FI status is related to child and caregiver health outcomes while controlling for covariates.

### Analysis

**Table 3** Relation Between FI Status on the HFSS and on the 2-Item FI Screen With Child and Caregiver Health Outcomes ($N = 30,098$)

<table>
<thead>
<tr>
<th></th>
<th>HFSS</th>
<th></th>
<th>FI Screen</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Food Secure</td>
<td>Food Insecure</td>
<td>aOR (95% CI)</td>
<td>P</td>
</tr>
<tr>
<td>Reported child health (fair/poor)</td>
<td>1.0</td>
<td>1.73 (1.50–1.88)</td>
<td>&lt;.001</td>
<td>1.0</td>
</tr>
<tr>
<td>Number of lifetime hospitalizations</td>
<td>1.0</td>
<td>1.19 (1.11–1.28)</td>
<td>&lt;.001</td>
<td>1.0</td>
</tr>
<tr>
<td>At risk for underweight</td>
<td>1.0</td>
<td>0.96 (0.88–1.05)</td>
<td>.38</td>
<td>1.0</td>
</tr>
<tr>
<td>Overweight</td>
<td>1.0</td>
<td>1.03 (0.94–1.12)</td>
<td>.56</td>
<td>1.0</td>
</tr>
<tr>
<td>Developmental risk$^a$</td>
<td>1.0</td>
<td>1.72 (1.51–1.97)</td>
<td>&lt;.001</td>
<td>1.0</td>
</tr>
<tr>
<td>Caregiver health (fair/poor)</td>
<td>1.0</td>
<td>2.28 (2.12–2.48)</td>
<td>&lt;.001</td>
<td>1.0</td>
</tr>
<tr>
<td>Caregiver positive depression screen</td>
<td>1.0</td>
<td>3.13 (2.91–3.37)</td>
<td>&lt;.001</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Data were adjusted for site, race/ethnicity, US-born mother versus immigrant, marital status, education, child gender, caregiver employment, breastfeeding, low birth weight, and maternal age. The sample was limited to families that were uninsured or receiving public insurance.

$^a$Developmental risk was determined by the PEDS ($\geq 1$ concern) only for children older than 4 months, and data collection began in 2004 ($n = 10,874$).
Results

Caregivers
- Almost 2x as likely to be in fair/poor health
- Almost 3x as likely to report depressive symptoms

Young children
- 56% more likely to be in fair/poor health
- 17% more likely to have been hospitalized
- 60% more likely to be at risk for developmental delays

- These associations are similar to, although slightly weaker than, the corresponding associations with the 18-item HFSS, which demonstrates convergent validity of the HVS as a measure of food insecurity.
Further Analysis

To assess whether the households identified as food insecure by the HVS experienced risk despite classification as food secure by the 18-item HFSS, analyses were repeated among those who were classified as food secure on the basis of the 18-item HFSS.

The HVS results show attenuated, but statistically significant, associations with poor child and caregiver health outcomes.

<table>
<thead>
<tr>
<th>Table 4: Relation Between FI Status on the 2-Item FI Screen and Child and Caregiver Health Outcomes Among the Subset of Food-Secure Households on the HFSS (N = 23,256)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FI Screen</strong></td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Reported child health (fair/poor)</td>
</tr>
<tr>
<td>Number of lifetime hospitalizations</td>
</tr>
<tr>
<td>At risk for underweight</td>
</tr>
<tr>
<td>Overweight</td>
</tr>
<tr>
<td>Developmental risk</td>
</tr>
<tr>
<td>Caregiver health (fair/poor)</td>
</tr>
<tr>
<td>Caregiver positive depression screen</td>
</tr>
</tbody>
</table>

Data were adjusted for site, race/ethnicity, US-born mother versus immigrant, marital status, education, child gender, caregiver employment, breastfeeding, low birth weight, and maternal age. The sample was limited to families that were uninsured or receiving public insurance.

*Developmental risk was determined by the PEDS (≥1 concern) only for children older than 4 months, and data collection began in 2004 (n = 8,497).
What’s Happened Since?

- Marginal food security matters!
- HVS validated for use in adolescent population
- HVS validated for use in US adult population

What’s Happened Since?

Questions have arisen...

- Why ask both HVS questions?
- Can question wording can be changed?
- Can response alternatives be “yes or no”?

Replacing the HFSS and HVS three response options with simplified “yes or no” options results in missing nearly 25% of food-insecure adults and lowers sensitivity from 94% to 76%

What’s Happened Since?

Development and validity of a 2-item screen to identify families at risk for food insecurity

ER Hager, AM Quigg, MM Black, SM Coleman... - Pediatrics, 2010 - Am Acad Pediatrics

OBJECTIVES: To develop a brief screen to identify families at risk for food insecurity (FI) and to evaluate the sensitivity, specificity, and convergent validity of the screen. PATIENTS AND METHODS: Caregivers of children (age: birth through 3 years) from 7 urban medical centers completed the US Department of Agriculture 18-item Household Food Security Survey (HFSS), reports of child health, hospitalizations in their lifetime, and developmental risk. Children were weighed and measured. An FI screen was developed on the basis of ...

How Hospitals Are Addressing Food Insecurity Hospitals & Health Networks - May 1, 2017

The health system uses the Children’s HealthWatch Hunger Vital Sign survey in its inpatient admission database and screened 57,224 patients...

Standardized Screening for Health-Related Social Needs in Clinical Settings The Accountable Health Communities Screening Tool

Alexander Billings, MS, DPH, Centers for Medicare & Medicaid Services; Katherine Mclean, MPH, Centers for Medicare & Medicaid Services; Susan Aronson, DVM, Centers for Medicare & Medicaid Services; Susan Apple, PhD, Centers for Medicare & Medicaid Services

May 30, 2017

The impacts of social health-related needs, such as homelessness, the assistance access to food, and insurance for primary health and health care utilization, are well-established. Growing and diverse in diseases that affect these and other needs can help reverse their damaging health effects, but screening for these needs in clinical settings is not a sufficient practice. Social health-related needs are often overlooked by clinicians and other staff from informing the care. The Centers for Medicare & Medicaid Services (CMS) Accountable Health Communities Model, jointly run by the Center for Medicare and Medicaid Innovation and the CMS Accountable Health Communities Model, aims to improve these clinical and community services in the current health care delivery system by using a comprehensive tool that includes a standardized means for identifying and screening for social needs and providing access to services.

How to Address Food Insecurity

Promoting Food Security for All Children

In order to address food insecurity, hospitals and health systems are increasingly adopting standardized screening tools, such as the Hunger Vital Sign, which can be used to refer to patients to additional resources and community services.

Next Steps:

- Enhancing community health care systems through integrated community health
- Addressing food insecurity through community health centers
- Implementing policies and practices that address food insecurity

References:

Stability: The Housing Iceberg

- Homeless
- Hidden homeless:
  - Housing instability
    - behind on rent
    - multiple moves
- Unaffordable housing
An Evolving Conceptual Definition of Housing Instability

What housing circumstances matter?

- 2011: multiple moves and overcrowding
- 2014: Homelessness during pregnancy (prenatal homelessness)
- 2018: Homelessness during infancy (postnatal homelessness)

An Evolving Conceptual Definition of Housing Instability

What housing circumstances matter?
• 2018: timing and duration of pre and postnatal homelessness
• 2018: Current understanding of housing instability

Since [current month] of last year,

1. Was there a time when you were not able to pay the mortgage or rent on time?
   
   Answer is yes/no, positive screen if answer is yes

2. How many places have you lived?
   
   Answer is # of places lived, positive screen if answer is 3 or more (i.e. multiple moves ≥ 2 in 12 mos.)

3. Was there a time when you did not have a steady place to sleep or slept in a shelter (including now)?
   
   Answer is yes/no, positive screen if answer is yes
Among 22,234 families, 34% had at least one adverse housing circumstance:

- 27% behind on rent
- 8% multiple moves
- 12% history of homelessness

Each circumstance individually associated with adverse health and material hardship compared to stable housing.
Little overlap among three adverse housing conditions
Outcomes of unstable housing with health and material hardship outcomes

- Child fair/poor health
- Maternal fair/poor health
- Maternal depression
- Food insecurity
- Energy insecurity
- Health care trade-offs

- Stable Housing
- Behind on Rent
- Multiple Moves
- Homelessness
Limitations & Next Steps

• There is no agreed upon definition of circumstances that define housing instability

• There is no gold standard housing stability measure against which the Housing Stability Vital Sign can be compared

• Investments in future research to create robust standard testing of a diagnostic tool, such as sensitivity and specificity analysis is warranted
Housing Instability Screening

Why Should Health Care Screen for Housing Stability and Other Social Determinants of Health?

How Should Health Care Providers Screen for Housing Stability in Clinical Settings?

While there is no agreed upon standard for screening for and assessing housing stability, previous research and current pilot projects have indicated the need to include questions that not only identify patients currently experiencing the most severe form of housing instability—homelessness—but also to identify patients and families experiencing instability that puts their health and well-being at risk.

Closing Thoughts

Clarity (your why)
Why am I screening for social risk?

Begets confidence (your how)
Am I using the right tool?

Followed by action (your what)
The work I do everyday!
Thank You!

The mission of Children’s HealthWatch is to improve the health and development of young children by informing policies that address and alleviate economic hardships.

Contact us:
richard.sheward@bmc.org

www.ChildrensHealthWatch.org
@ChildrensHW
• The webinar recording and slides will both be available on the SIREN website (sirenetwork.ucsf.edu) next week.

• Please give us feedback on this webinar by filling out the evaluation survey: http://bit.ly/SIRENJuly18

THANKS