Identifying Food Insecurity in Health Care Settings

February 27, 2018
Online resource hub

Tools & Resources

As part of SIREN's mission to synthesize, disseminate, and catalyze high quality research, we collect and share tools and resources that we hope can help research teams and health care delivery system stakeholders both better evaluate and more easily present information on the evidence on social and medical care integration. These resources include not only our Evidence Library, but also reports, issue briefs, and commentaries on relevant topics, social and economic determinants screening tools, webinars and presentations that have been conducted in this field, and other resources that you can use for your own presentations and grant proposals.

siren
http://sirennetwork.ucsf.edu/
Accountable Health Communities Screening Tool
2017  |  A. Billoux, K. Verlander, S. Anthony, D. Alley

From the National Academies of Medicine: "With input from a panel of national experts and after review of existing screening instruments, CMS developed a 10-item screening tool to identify patient needs in 5 different domains that can be addressed through community services (housing instability,...

IOM Recommended Social and Behavioral Domains and Measures for Electronic Health Records
2014  |  Committee on Recommended Social & Behavioral Domains & Measures for Electronic Health Records

Determinants of health—like physical activity levels and living conditions—have traditionally been the concern of public health and have not been linked closely to clinical practice. However, if standardized social and behavioral data can be incorporated into patient electronic health records (EHRs..."

PRAPARE: Protocol for Responding to and Assessing Patients’ Assets, Risks and Experiences
2016  |  NACHC, Association of Asian Pacific CHOs, Oregon Primary Care Association, Institute for Alternative Futures

The Protocol for Responding to and Assessing Patients’ Assets, Risks, and Experiences (PRAPARE) was developed by NACHC and partners to help health centers and other providers collect the data needed to better understand and act on their patients’ social determinants of health. The

Health Leads Social Needs Screening Toolkit
2016  |  Health Leads

Drawing on Health Leads’ experience and recent federal guidelines, this toolkit..."
Search SIREN's Evidence Library

http://sirenetwork.ucsf.edu/
Consultation and Collaboration Opportunities
Today’s Speakers

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Assistant Professor
UCSF Department of Epidemiology & Biostatistics

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Departments of Internal Medicine and Pediatrics
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Identifying Food Insecurity in the Health Care Setting: A Review of the Literature

Emilia De Marchis, MD & Jacqueline Torres, PhD, MPH
SIREN Webinar
February 27, 2018
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Background

• Food insecurity (FI) linked to health across the life-course
• Growing interest in screening and acting on patients’ social determinants of health (SDH)
• Lack of clear guidelines on screening tools & implementation in health care settings
A Systematic Scoping Review of FI Screening in the Health Care Setting
“Scoping” Review?

• Inclusive of wide range of content domains and methods
• Useful for mapping out landscape of emerging research:
  • Clarify boundaries
  • Identify key gaps
• Still rigorous, replicable!

(Colquhoun et al. 2013. J Clin Epidemiol)
Brief Methods

• PubMed and EMBASE/Medline databases

• Inclusion Criteria:
  • Peer-reviewed research
  • January 2000 – July 2017
  • FI screening in the health care setting
  • Could be done alongside other SDH screening
    • FI outcomes needed to be specified
Results
Overview

• 26 unique articles

• Study designs:
  • 1 cluster RCT, 2 RCTs, 2 single-group pre-post
  • Multiple qualitative & mixed-method
Overview

• Multiple domains:
  • 10 measurement
  • 16 implementation
  • 10 patient/provider acceptability
• 23/26 pediatric or young adult settings
Validity of Brief FI Screening Tools

• 4 studies, 3 different screeners

• All compared to 18-item USDA-FSS
# Validity of Brief FI Screening Tools

<table>
<thead>
<tr>
<th>Two-Item Hunger* Vital Sign™ in Hager et al &amp; Baer et al</th>
<th>One-Item SEEK Screener in Lane et al</th>
<th>One-Item Screener in Kleinman et al</th>
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<tbody>
<tr>
<td>“Within the past 12 months, we worried whether our food would run out before we got money to buy more.”</td>
<td>“In the last year, did you worry that your food would run out before you got money or food stamps to buy more?”</td>
<td>“In the past month, was there any day when you or anyone went hungry because you did not have enough money for food?”</td>
</tr>
<tr>
<td>• Often True, Sometimes True, Never True</td>
<td>• Yes, No</td>
<td>• Yes, No</td>
</tr>
<tr>
<td>“Within the past 12 months, the food we bought just didn't last and we didn't have enough money to get more.”</td>
<td></td>
<td></td>
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<tr>
<td>• Often True, Sometimes True, Never True</td>
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Validity of Brief FI Screening Tools

- Hunger Vital Sign™ 2-item:
  - 89-97% sensitivity; 83-84% specificity
- SEEK 1-item:
  - 59% sensitivity; 87% specificity
- Kleinman et al 1-item:
  - 83% sensitivity, 80% specificity
FI Screens vs. Need/Desire for Assistance

• 3 observational studies, all using Online Advocate tool
  • Bottino et al: 340 caregivers; 6-item USDA

50% of those with FI asked for food referrals
50% of those asking for food referrals were FI
FI Screens vs. Need/Desire for Assistance

- Hassan et al: 401 young adults; Hunger Vital Sign™
  - 29% positive for FI
  - 17% wanted referral

- Wylie et al: 50 young adults; Hunger Vital Sign™
  - 34% positive for FI
  - 32% wanted food referral
Screening Modality

- 3 studies: 1 RCT directly comparing methods

- Gottlieb et al: 538 caregivers in a pediatric ED randomized to tablet-based self-administration OR face-to-face.
  - 23-item psychosocial needs questionnaire
  - No differences in FI disclosure
Time for Screening

• 10 articles addressed perceived and actual time burden
• Range 30 seconds to 10-15 minutes to complete
• Mixed findings regarding providers’ perceived time burden
• O’Toole et al: 40 pediatric residents
  • Residents in clinics with more resources to address SDH (e.g. social workers) spent more time on SDH screening (160 sec. versus 37.5 sec. for low resource clinics)
Increasing Screening Uptake

- 7 articles evaluated interventions to improve uptake (all among pediatric residents)

- Range of interventions:
  - Training via video, in-person, observations and feedback, visiting food banks and other social services
Increasing Screening Uptake

• Residents trained on FI/SDH had higher screening rates/self-reported ability to screen

• Burkhardt et al: 24 pediatric residents
  • Incorporated clinic-wide strategies
  • FI identification increased from 1.0% to 11.9%
Patient and Provider Acceptability

• Overall, patients/caregivers receptive to FI screening

• Some concern about how results would be used

• Providers report high acceptability of screening, as long as they have access to resources to address identified needs.

• Providers may feel more comfortable having FI screening completed prior to visits
Conclusions

• Brief FI screening tools validated in health care settings

• Inconsistent overlap: screening positive vs. wanting food-related assistance from the health care setting

• Limited research on modality

• Screening can be quick!

• Training on FI/SDH screening can improve uptake

• Patients/caregivers open to screening, especially when explained

• Providers open to screening, especially with training and resources
Please visit sirenenetwork.ucsf.edu for full issue brief
Food Insecurity in Practice

• Most food insecurity studies have focused on urban practices

• Less is known about the feasibility & acceptability of screening in other areas

The Rapid Rise of Suburban Poverty

Poor Population in Cities and Suburbs, 95 Large Metro Areas, 1970 to 2012

Used with permission from BROOKINGS INSTITUTION ANALYSIS OF DECENNIAL CENSUS AND AMERICAN COMMUNITY SURVEY
Objective

Determine the feasibility and acceptability of screening for food insecurity in suburban primary care practices
Study Design & Setting

• Design:
  • Prospective mixed methods study
  • 2, 15, and 36-month well child visits

• Setting:
  • 6 suburban pediatric practices
Outcome Measures

• Feasibility:
  • Number of families eligible for screen
  • Number screened
  • Results of the screen
Outcome Measures

• Acceptability:
  1. Perceptions of screening
  2. Interactions with parents and clinicians
  3. Suggestions for improvement
• Focus groups of clinicians at each site
• Semi-structured interviews with parents of food insecure children
5,648 Eligible

4371 (77.4%)
Families screened

122 (2.8%)
Positive screen
### Clinicians

1. Embarrassing families and providing adequate resources were barriers

“**Oh, I think it works fine with flow. I think people are still like, ‘Oh, I don’t know if I want to ask this question. Am I going to embarrass them.’**”
Clinicians

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2. Screening showed caring which reinforced clinicians continued screening

“I do think it sent a message to the patients that you care about this social issue.”
## Clinicians

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“I do think it sent a message to the patients that you care about this social issue.”

### 3. Screening prior to the visit

“[it would be better if] it was something that getting screened for before we even set foot in the room. If they screen negative great. If they screen positive, then we would get a flag or something.”
Parents

1. Initially surprised, but ultimately felt comfortable discussing food insecurity

“-it was kinda weird, I guess. I wasn’t expecting it. But at the same time, it would be helpful to people if they are honest.”
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2. Parents experience shame and helplessness regarding food insecurity, but discussing with their clinician helps alleviate these feelings

“\textit{I was a little shocked because usually they don’t ask that. It gave me an opportunity to say something to somebody who might be able to help.}”
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“I was a little shocked because usually they don’t ask that. It gave me an opportunity to say something to somebody who might be able to help.”

3. Parents felt information about local resources would be most helpful

“I personally think they could have more options of where to go if they are having trouble...Especially if they can’t qualify for food stamps or something like that.”
• **Feasible** to screen in suburban practices
  • 77% of families who were eligible were screened
  • 2.8% of families food insecure (0.9-5.9% across clinics)
• Feasible to screen
  • 77% of families who were eligible were screened
  • 2.8% of families were food insecure (0.9-5.9% across clinics)

• **Acceptable** to screen
  • Did not interfere with time or workflow
  • Parents felt it showed the clinic cared
  • Screen prior to the visit and connect families to local resources
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Questions
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