Unpacking patient perspectives on social needs screening: A mixed methods study in western Colorado primary care practices

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PEACH NET
Partners Engaged in Achieving Change in Health

Department of Family Medicine

ACCORDS
ADULT AND CHILD CONSORTIUM FOR HEALTH OUTCOMES RESEARCH AND DELIVERY SCIENCE
UNIVERSITY OF COLORADO | CHILDREN'S HOSPITAL COLORADO

Background

Screening and Referral for Health-Related Social Needs (“social needs”)

- Inequities in the social determinants of health result in social needs at the individual level (examples: food insecurity; housing instability)
- Social needs negatively impact health
  - For example: food insecurity is associated with higher rates of Type II Diabetes
- Many primary care practices now aim to screen patients for social needs and refer those with needs to resources in the community
- “Deeper and more rigorous research is needed to better inform patient-centered approaches to social screening.” –*SIREN’s State of the Science of Screening in Healthcare Settings*

References: The National Academies of Science, Engineering & Medicine, 2019; Alderwick & Gottlieb, 2019; USDHHS, 2020; Marmot, 2008; Marchis, 2023

The Improving Messaging And Gaps in Needs and rEferrals (IMAGINE) study

IMAGINE (January 2020 – December 2021) developed and tested improved strategies for communicating with patients about social needs screening and referral

This secondary analysis used IMAGINE data to explore factors influencing patient comfort with screening and perceived helpfulness of screening for social needs

Nederveld, A. L., Duarte, K. F., Rice, J. D., Richie, A., & Broaddus-Shea, E. T. (2022). IMAGINE: a trial of messaging strategies for social needs screening and referral. *American Journal of Preventive Medicine*, *63*(3), S164-S172.

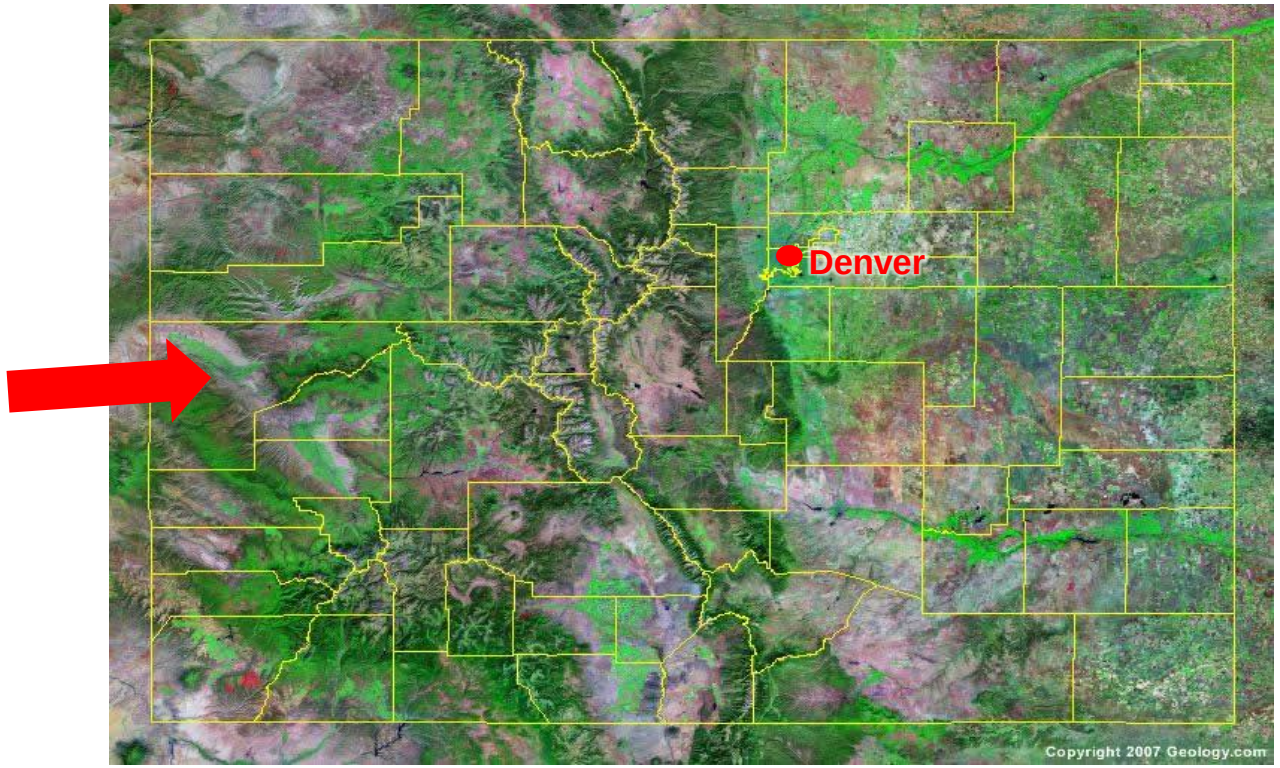
Theoretical perspective

- **Relationship-centered care** emphasizes importance of communication and relationships among patients, their clinicians, and the wider network of individuals involved in clinical care
- Suggests that the extent to which patients are comfortable with social needs screening and find it helpful will depend on both individual lived experiences and practice-level factors

References: Beach, 2006; Suchman, 2006; Schoenthaler, 2019; Schoenthaler, 2022

Setting: Western Colorado (Mesa County)

- Largely rural area with one small city (Grand Junction)
- Census data indicates population primarily non-Hispanic white (80%), Hispanic white (7%), Hispanic two+ races (6%), or Hispanic other (2%)
- High prevalence of social needs
- Part of the Centers for Medicaid and Medicare's Accountable Health Communities (AHC) initiative



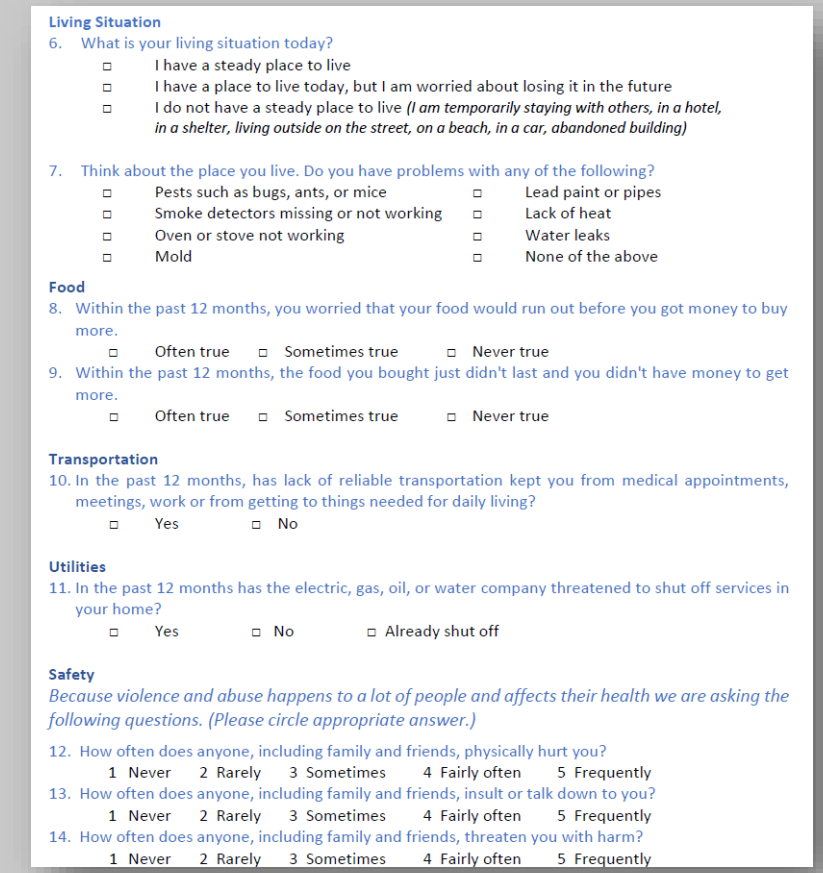
Sites: Three Primary Care Clinics

Members of Partners Engaged in Achieving Changes in Health network (PEACHnet)– a western-Colorado practice-based research network

Safety-net clinics: 45-49% of patient population covered by Medicaid

Implementing social needs screening and referral as part of the Accountable Health Communities initiative

AHC Health-Related Social Needs Screener



Living Situation

6. What is your living situation today?
   - ☐ I have a steady place to live
   - ☐ I have a place to live today, but I am worried about losing it in the future
   - ☐ I do not have a steady place to live *(I am temporarily staying with others, in a hotel, in a shelter, living outside on the street, on a beach, in a car, abandoned building)*

7. Think about the place you live. Do you have problems with any of the following?
   - ☐ Pests such as bugs, ants, or mice
   - ☐ Smoke detectors missing or not working
   - ☐ Oven or stove not working
   - ☐ Mold
   - ☐ Lead paint or pipes
   - ☐ Lack of heat
   - ☐ Water leaks
   - ☐ None of the above

Food

8. Within the past 12 months, you worried that your food would run out before you got money to buy more.
   ☐ Often true ☐ Sometimes true ☐ Never true
9. Within the past 12 months, the food you bought just didn't last and you didn't have money to get more.
   ☐ Often true ☐ Sometimes true ☐ Never true

Transportation

10. In the past 12 months, has lack of reliable transportation kept you from medical appointments, meetings, work or from getting to things needed for daily living?
    ☐ Yes ☐ No

Utilities

11. In the past 12 months has the electric, gas, oil, or water company threatened to shut off services in your home?
    ☐ Yes ☐ No ☐ Already shut off

Safety

Because violence and abuse happens to a lot of people and affects their health we are asking the following questions. (Please circle appropriate answer.)

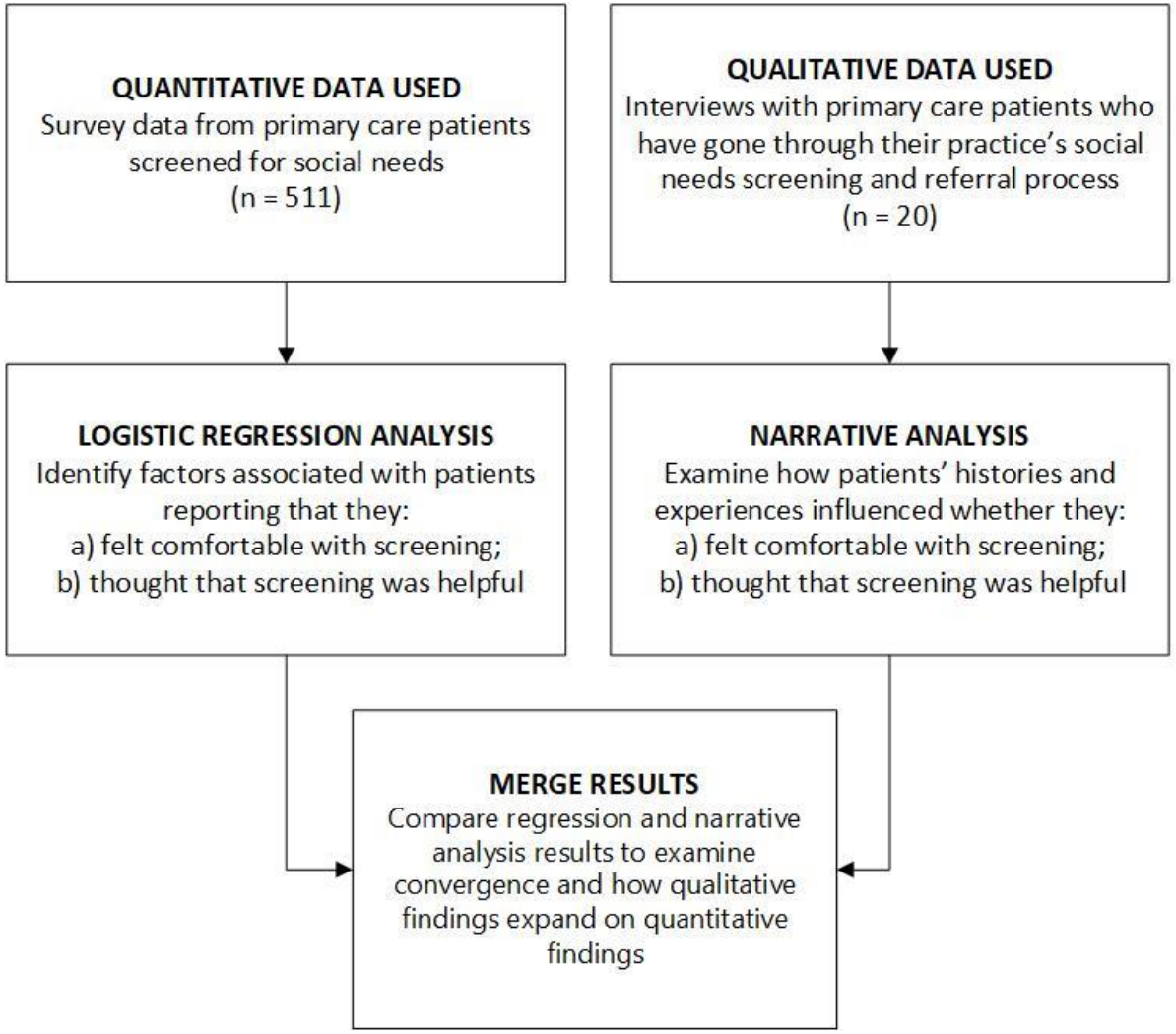
12. How often does anyone, including family and friends, physically hurt you?
    1 Never 2 Rarely 3 Sometimes 4 Fairly often 5 Frequently
13. How often does anyone, including family and friends, insult or talk down to you?
    1 Never 2 Rarely 3 Sometimes 4 Fairly often 5 Frequently
14. How often does anyone, including family and friends, threaten you with harm?
    1 Never 2 Rarely 3 Sometimes 4 Fairly often 5 Frequently

Full version available at:
https://innovation.cms.gov/files/worksheets/ahcm-screeningtool.pdf

- Screens for 5 core needs:
  - Housing stability & adequacy
  - Food security
  - Transportation
  - Utilities
  - Interpersonal safety

Methods

Parallel Mixed-Methods Design



Results

Survey Participant Characteristics

Total (N)	***511***
Received an Explanation of Reason for Screening (%)	
No	64.4
Yes	35.6
Staff Member that Distributed Screening Form (%)	
Front Office	76.3
MA	23.4
Site (%)	
Clinic 1	32.1
Clinic 2	33.5
Clinic 3	34.4
Number of Reported Needs (%)	
0 needs	51.1
1 need	23.1
2 needs	12.7
3 or more needs	13.1
Income Category	
<10k	32.3
10k-<35k	44.6
>35k	12.3
no response	10.8
Age Category (%)	
18-40	31.3
40-64	47.2
65+	21.5
Gender (%)	
Female	63.6
Male	36.4
Identified as Hispanic or with a Latin American Ethnicity (%)	
No	80.0
Yes	20.0

Interview Participant Characteristics

Total (N)	***20***
Site (n)	
Clinic 1	6
Clinic 2	8
Clinic 3	6
Age Category (n)	
18-44	7
45-64	11
65+	2
Gender (n)	
Female	16
Male	4
Identified as Hispanic or with a Latin American Ethnicity (n)	
No	15
Yes	5
Highest Level of Education (n)	
Some high school	2
Completed high school	6
Some college	5
Associate degree	5
Bachelor's degree	2
Employment (n)	
Unemployed	13
Employed	7

- All were experiencing at least one social need

Logistic Regression Results

	Comfort with Screening		Perceived Helpfulness of Screening	
	Unadjusted OR (95% CI)	Adjusted OR (95% CI)	Unadjusted OR (95% CI)	Adjusted OR (95% CI)
Received an Explanation of Reason for Screening				
No	1.0	1.0	1.0	1.0
Yes	**2.3 (1.3-4.3)**	**2.0 (1.1-4.0)**	**3.7 (2.5-5.6)**	**3.8 (2.3-6.0)**
Staff Member that Distributed Screening Form				
Front Office	1.0	1.0	1.0	1.0
Medical Assistant	1.9 (0.9-3.7)	1.3 (0.6-2.8)	**1.7 (1.1-2.6)**	0.9 (0.6-1.6)
Site				
Clinic 1	1.0	-	1.0	1.0
Clinic 2	1.0 (0.5-1.8)	-	**2.0 (1.3-3.1)**	**2.1 (1.3-3.3)**
Clinic 3	1.3 (0.7-2.5)	-	1.4 (0.9-2.2)	1.5 (1.0-2.5)
Number of Reported Needs				
0 needs	1.0	1.0	1.0	1.0
1 need	0.6 (0.3-1.1)	0.6 (0.3-1.2)	1.1 (0.7-1.6)	1.0 (0.6-1.7)
2 needs	**0.3 (0.2-0.7)**	**0.4 (0.2-0.8)**	0.7 (0.4-1.1)	0.7 (0.4-1.3)
3 or more needs	**0.2 (0.1-0.4)**	**0.2 (0.1-0.5)**	0.9 (0.5-1.6)	1.0 (0.6-1.8)
Income Category				
<10k	1.0	1.0	1.0	1.0
10k-<35k	1.5 (0.2-2.6)	1.1 (0.6-2.0)	1.3 (0.9-2.0)	1.2 (0.8-1.9)
>35k	2.4 (0.9-6.4)	1.6 (0.5-4.5)	0.8 (0.4-1.4)	0.7 (0.4-1.4)
no response	0.8 (0.4-1.8)	0.6 (0.3-1.4)	0.7 (0.4-1.2)	0.6 (0.3-1.2)
Age Category				
18-40	1.0	1.0	1.0	1.0
40-64	0.7 (0.4-1.2)	0.8 (0.5-1.5)	0.9 (0.6-1.3)	0.9 (0.6-1.4)
65+	**2.8 (1.1-7.1)**	2.5 (0.9-6.5)	1.6 (0.9-2.6)	1.6 (0.9-2.7)
Gender				
Female	1.0	1.0	1.0	-
Male	1.6 (0.9-2.7)	1.5 (0.9-2.7)	1.0 (0.7-1.4)	-
Identified as Hispanic or with a Latin American Ethnicity				
No	1.0	-	1.0	-
Yes	1.2 (0.6-2.2)	-	1.1 (0.7-1.7)	-

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Clinic 1	1.0	-	1.0	1.0
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Age Category				
18-40	1.0	1.0	1.0	1.0
40-64	0.7 (0.4-1.2)	0.8 (0.5-1.5)	0.9 (0.6-1.3)	0.9 (0.6-1.4)
65+	**2.8 (1.1-7.1)**	2.5 (0.9-6.5)	1.6 (0.9-2.6)	1.6 (0.9-2.7)
Gender				
Female	1.0	1.0	1.0	-
Male	1.6 (0.9-2.7)	1.5 (0.9-2.7)	1.0 (0.7-1.4)	-
Identified as Hispanic or with a Latin American Ethnicity				
No	1.0	-	1.0	-
Yes	1.2 (0.6-2.2)	-	1.1 (0.7-1.7)	-

Narrative Analysis Results

- Narratives showed how the extent and duration of a patients' social needs and their experiences with their healthcare team influenced patient comfort with and perceived helpfulness of social needs screening and referral
- These results both helped to explain and expanded on our quantitative findings

Integrated Findings

	Quantitative Findings	Convergent* Qualitative Findings	Expanded† Qualitative Findings
Patient experiences with social needs			
Patient experiences interacting with healthcare team			

*Findings that lead to the same interpretation and help to explain other findings
†Findings that provide a broader nonoverlapping interpretation

Integrated Findings

	Quantitative Findings	Convergent* Qualitative Findings	Expanded† Qualitative Findings
Patient experiences with social needs	• Those experiencing more needs were significantly less likely to report comfort with screening compared to patients with fewer needs.	• Those with extensive long-term needs described more exposure to stigmatizing experiences. • Stigmatizing experiences contributed to greater discomfort disclosing needs.	• Those with extensive long-term needs often described negative and/or unhelpful past experiences trying to access assistance. • Negative past experiences seeking assistance contributed to greater skepticism about the helpfulness of screening.
Patient experiences interacting with healthcare team			

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Patient experiences interacting with healthcare team	• Those receiving an explanation about the purpose of screening were significantly more likely to report comfort and perceiving it as helpful.	• Those who described good communication about screening felt comfortable with it and thought it was helpful. • Those who described poor or limited communication indicated more discomfort and/or skepticism about helpfulness.	• Relationship quality with their healthcare team was particularly important for those with extensive long-term needs. • Negative relationships contributed to discomfort with and skepticism about the helpfulness of screening. • Positive relationships contributed to comfort with and high perceived helpfulness of screening.

*Findings that lead to the same interpretation and help to explain other findings
†Findings that provide a broader nonoverlapping interpretation

Discussion

Key Take-Aways

- Importance of explanations about social needs screening and referral for all patients
- Patients with more needs felt less comfortable with screening– may be due to context-specific attitudes towards social needs and assistance
- For patients with limited needs, referrals were a valuable source of information about resources they often were unfamiliar with
- For patients with extensive needs, relationship with their healthcare team was key and determined whether they saw screening and referral as intrusive/patronizing vs. caring/supportive
- When patient-practice relationships are good, screening and referral can still be a positive experience for patients, even if it does not result in new resource connections

Practice Implications

Clearly explain screening and referral processes using patient-friendly messages

Acknowledge past experiences patients may have had navigating social assistance– “What have you already tried?”

Consider patient’s history and rapport with practice when deciding if and how to screen

Structural competency training could be valuable for providers and staff

Limitations

- Limited geographic scope and diversity of participants
- Did not interview Spanish-only speakers
- Survey captured only perceived helpfulness at the time of screening
- Need for longer term follow-up with larger number of patients in future studies

Acknowledgments

- Support for the IMAGINE project was provided by the Social Interventions Research and Evaluation Network (SIREN) with funding from the Robert Wood Johns Foundation (RWJF)
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Thank You!

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Narrative Analysis Results

Pattern I (n = 5)	▪ Short-term, specific experiences with social needs ▪ Good interactions, good communication with healthcare team ➢ High comfort with and perceived helpfulness of social needs screening and referral
Pattern II (n = 4)	▪ Short-term, specific experiences with social needs ▪ Neutral interactions and imited communication with healthcare team ➢ Some discomfort with and skepticism about helpfulness of social needs screening and referral
Pattern III (n = 4)	▪ Long-term, extensive experiences with social needs ▪ Poor interactions, poor communication with healthcare team ➢ Low comfort with and perceived helpfulness of social needs screening and referral
Pattern IV (n = 7)	▪ Long-term, extensive experiences with social needs ▪ Good interactions, good communication with healthcare team ➢ High comfort with and perceived helpfulness of social needs screening and referral

"Yesenia" just had her second child and has temporarily stopped working. Her family usually can make ends meet, but now they are having some challenges paying bills and affording groceries. She recalled feeling comfortable indicating this on her screening form because, "[the practice staff] always makes me feel comfortable. To me they've always been very helpful and nice, and whenever I have questions, they're always there to answer me." She found the resources she was referred to very helpful.

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Pattern IV (n = 7)	▪ Long-term, extensive experiences with social needs ▪ Good interactions, good communication with healthcare team ➢ High comfort with and perceived helpfulness of social needs screening and referral

"Dwayne" has worked as a truck driver for most of his life but had to leave his job recently due to health issues: "this is the first time I've actually had to access any type of benefits." He recalled being given the screening form without any explanation at a recent doctor's appointment, wondering why they were being asked, and feeling somewhat uncomfortable and skeptical answering them. However, he answered the screening questions anyway and was able to access SNAP and other resources that he was previously unfamiliar with via the referrals he received.

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"Linda" has been unemployed for years due to chronic health conditions. She relies on multiple benefits programs but still experiences food insecurity and housing instability and described frequently feeling judged and being questioned about whether she really needed or deserved benefits. She described previous negative experiences with her healthcare team, including her doctor calling her "non-compliant" for not taking a medication that she couldn't afford. She was skeptical and hesitant to answer the screening questions and found the referrals unhelpful and patronizing because, "it's stuff that I'd already done" and she felt she was being judged for not trying harder.

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"Kristi" previously experienced homelessness but now is housed and currently working. However, she still struggles to pay rent and other expenses. She said in the past, "I didn't want nobody knowing that I was at a shelter," and described feeling judged when applying for benefits. But she felt comfortable answering screening questions at her doctor's office because, "essentially, it depends on the relationship you have with your care providers." She didn't connect with any resources that she wasn't already utilizing, but "it made me feel that they cared."