Clinician Awareness of Patient-Reported Health-Related Social Needs: There's Room for Improvement



Shivani Beall, MS4; Jordan Nelson MS4; Andrea Nederveld, MD, MPH; Kaitlyn Bertin, MS; L Miriam Dickinson, PhD; Russ Glasgow, PhD; Amy Huebschmann, MD, MSPH

¹University of Colorado Department of Family Medicine, ²Adult and Child Center for Outcomes Research, ³University of Colorado School of Medicine, ⁴University of Colorado Department of Internal Medicine



Background

- People experiencing health-related social needs (HRSNs), such as transportation security, appear less likely to undergo preventive health procedures such as cancer screening
- Recent guidelines recommend "adjustment of care" based on patient HRSNs
- Due to limited time with patients, clinicians are often not involved in HRSN screening process or review of results
- Whether primary care clinicians are aware of patient HRSNs is unclear
- Improving awareness could allow for tailoring of patient care and improved patient outcomes

Methods

- Design: Paired one-time patient-clinician survey regarding HRSNs
- Population: Patients between the ages of 50 and 85 and primary care clinicians in 3 clinics in western Colorado
- Methods:
 - Survey domains were up-to-date status for colorectal cancer screening and HRSNs including food insecurity, transportation insecurity, housing instability, financial insecurity related to healthcare costs, financial insecurity related to utilities, and social isolation
 - Patients completed the survey after nonurgent/acute primary care visits
 - Clinicians completed the survey by answering the same questions, reporting their perspective on the patient's HRSNs

Objectives

- 1. We sought to compare clinician and patient report of patient experience of health-related social needs.
- 2. We sought to assess clinician awareness of different social needs that could impact cancer screening.

	Total sample
Characteristic, n (%)	(N = 237)
Age, mean (SD)	65.0 (8.1)
Sex at birth	
Female	148 (62.4%)
Male	89 (37.6%)
Race/ethnicity	
Hispanic or Latino/a/x	31 (13.1%)
Non-Hispanic White	172 (72.6%)
Other or mixed race	22 (9.3%)
Prefer not to say/missing	12 (5.1%)
Clinician is designated PCP	
Yes	212 (89.5%)
No	21 (8.9%)
Missing	4 (1.7%)
Clinician length of care	
Today was the first visit	27 (11.4%)
Less than 1 year	25 (10.5%)
1-3 years	178 (75.1%)
More than 3 years	7 (3.0%)

Table 1: Patient characteristics

Social need, n (%)	Patient- reported	Provider-reported
Any HRSN(s)	100 (42.2%)	43 (18.1%)
Lack of steady housing	16 (6.8%)	8 (3.4%)
Food insecurity	69 (29.1%)	7 (3.0%)
Lack of reliable	22 (9.3%)	19 (8.0%)
transportation		
Can't afford to pay utilities	16 (6.8%)	8 (3.4%)
Social isolation	17 (7.2%)	17 (7.2%)
Can't afford medications	41 (17.3%)	21 (8.9%)
or care		

Table 2: Patient and clinician reported social needs

Measures of Concordance

	Patient Positive	Patient Negative		Patient Positive	Patient Negative
Clinician Positive	4 (1.7%)	4 (1.7%)	Clinician Positive	5 (2.1%)	2 (0.8%)
Clinician Negative	12 (5.1%)	217 (91.6%)	Clinician Negative	64 (27.0%)	166 (70.0%)

Table 4: Food insecurity

Table 3: Lack of steady housing

	Patient Positive	Patient Negative		Patient Positive	Patient Negative
inician ositive	9 (3.8%)	10 (4.2%)	Clinician Positive	3 (1.3%)	5 (2.1%)
inician egative	13 (5.5%)	205 (86.5%)	Clinician Negative	13 (5.5%)	216 (91.1%)

Table 5: Lack of reliable transportation Table 6: Can't afford utilities

	Patient Positive	Patient Negative		Patient Positive	Patient Negative
Clinician Positive	5 (2.1%)	12 (5.1%)	Clinician Positive	7 (3.0%)	14 (5.9%)
Clinician Negative	12 (5.1%)	208 (87.8%)	Clinician Negative	34 (14.3%)	182 (76.8%

Table 7: Social isolation

Table 8: Can't afford medications/care

	Kappa Coefficient (95% CI)
Any HRSN(s)	0.22 (0.11, 0.33)
Lack of steady housing	0.30 (0.05, 0.55)
Food insecurity	0.08 (0.00, 0.17)
Lack of reliable transportation	0.39 (0.18, 0.59)
Can't afford utilities	0.21 (-0.02, 0.45)
Social isolation	0.24 (0.03, 0.45)
Can't afford medications/care	0.12 (-0.02, 0.27)

Table 8: Kappa Coefficients for each HRSN, with a coefficient of 0 indicating no agreement and a coefficient of 1.0 indicating perfect agreement

Conclusions

- Even in clinics screening for HRSNs, clinicians are often not aware of patient needs
- Concordance was highest for needs that may be more visible for example, transportation insecurity
- These results suggest that clinicians do not have the necessary information to adjust care for patients experiencing HRSNs

Implications

- To improve disparities in CRC screening, team-based care pathways that do not rely solely on the awareness of clinicians to address HRSNs may be needed (e.g. stool stool-based testing for patients with transportation insecurity)
- For clinical interventions that would benefit from clinician awareness of patient HRSNs, workflows that automate the sharing of this information are needed
- New workflows should also account for the already heavy primary care workload

Acknowledgements

- Funded by NCI Supplement to COISC3 (P50CA244688-03S5) - (PI Glasgow)
- Jordan Nelson and Shivani Beall contributed to literature review, data entry and management, manuscript preparation, and dissemination of findings.