

# A short-form screening tool for detecting social needs efficiently in pregnancy

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## OBJECTIVE



To assess the sensitivity and specificity of a 3-question, comprehensive digital SDoH screener relative to a validated screener.

## BACKGROUND

Social determinants of health (SDoH) are the conditions where people live, work, and play, and include:

- Material needs (tangible): including housing, food, and baby supplies
- Support needs (relationship-based): childcare, intimate partner violence and social isolation

Social determinants of health (SDoH) affect 40% to 80% of healthcare outcomes. Traditional screening tools for SDOH can be burdensome. The standard screener has over 20 questions.

## STUDY DESIGN

### Survey development:

- Developed a 3-question, short-form SDoH screener using domains from existing validated screeners.
- Cognitively tested and refined the screener with 5 pregnant and postpartum people.

### Survey testing:

- Tested the short-form screener as part of a nationally diverse, cross-sectional online survey of pregnant and postpartum people using Centiment, an online survey panel.
- By design, cohort included equal numbers of participants with public and private insurance, given differences in SDOH and access to resources in these groups.
- Participants completed the short-form and a validated screener (PRAPARE).
- Calculated the sensitivity and specificity of the short-form screener compared to PRAPARE for overall, material and social support needs.

## RESULTS

Figure 1. Unmet social needs

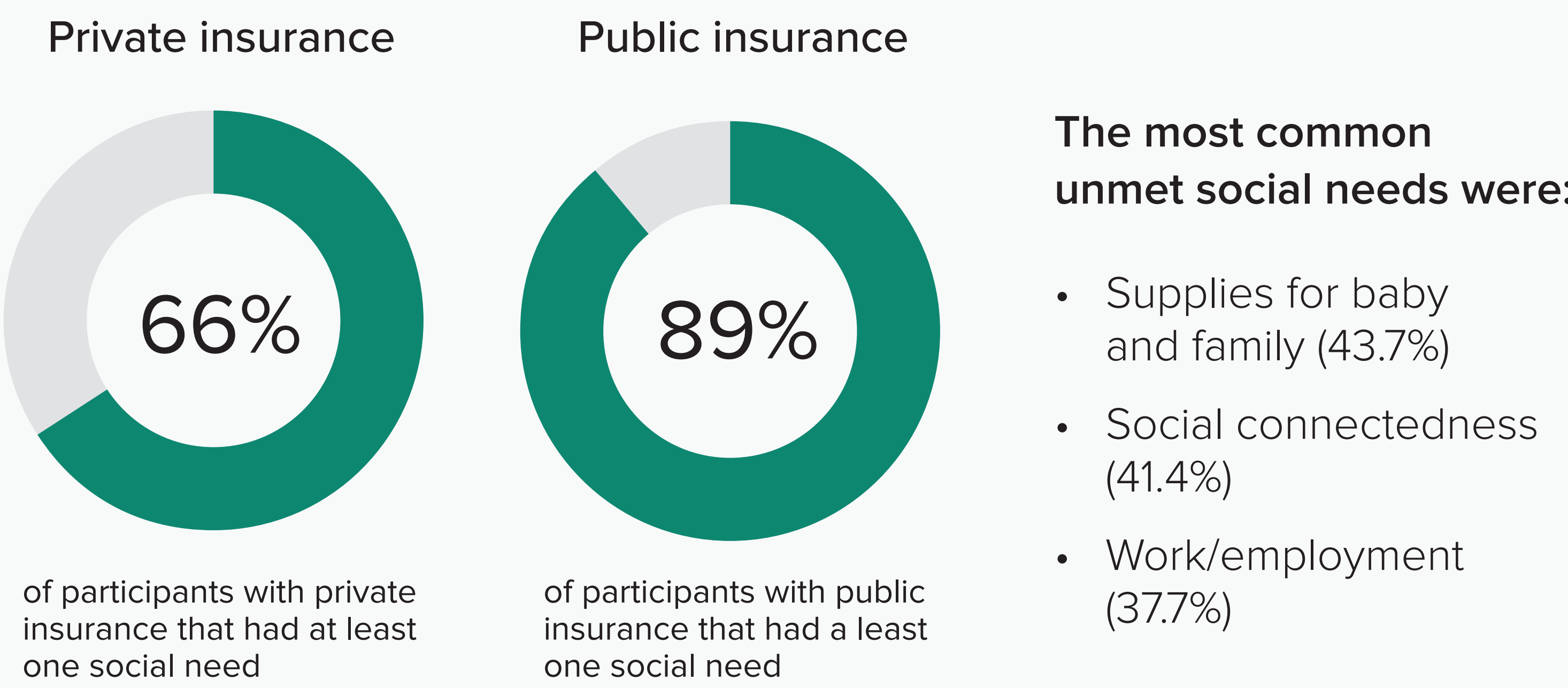


Figure 2. Participant demographic characteristics

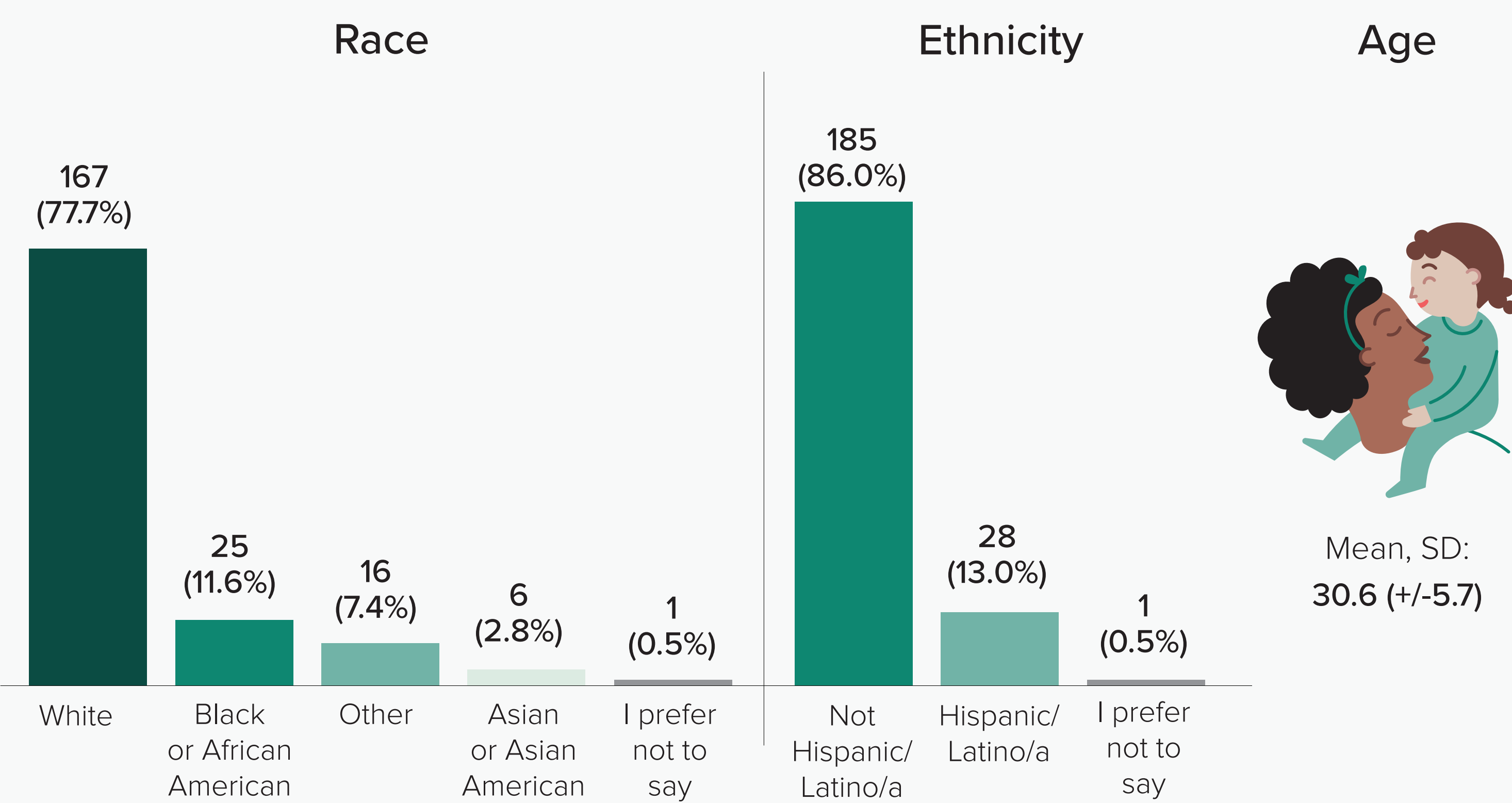


Table 1. Sensitivity and specificity of short-form screening tool vs. PRAPARE

	Sensitivity	Specificity
Material need	82.4%	75.4%
Support needs	63.4%	67.5%
Any need	79.3%	71.4%

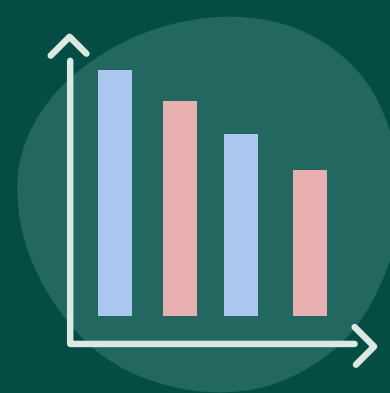
Table 2. Comparison of the short-form social needs screening tool and PRAPARE

	Short-form	n (%)	PRAPARE	n (%)
Material needs				
Any material need	Sum of all material needs	65.1%	Sum of all material needs	67.9%
Housing	Housing*	27.4%	Any identified housing need	31.6%
			What is your housing situation today (I do not have housing)	12.6%
			Are you worried about losing your housing? (Yes)	24.2%
Food	Food*	37.2%	Food*	34.4%
Utilities	Utilities (example: water, gas, electricity)*	31.2%	Utilities*	29.3%
Medical care	Medicine or any healthcare*	30.7%	Medicine or any healthcare (medical, dental, mental health, vision) *	36.7%
			Transportation limited access to healthcare (Yes)	
			Transportation has kept me from medical appointments or medication (Yes)	36.3%
			Yes, it has kept me from medical appointments or medication	
Phone	Phone/internet*	27.4%	Phone*	28.8%
Supplies	Supplies for baby and family*	43.7%	Clothing*	35.3%
Work	Work/employment*	37.7%	What is your current work situation? (Unemployed)	25.6%
Support needs				
Any support needs	Sum of all support needs	57.7%	Sum of all support needs	81.4%
Caregiving	Care for children, elders or household members with disabilities*	26.0%	Childcare*	33.4%
Social isolation	Do you feel lonely or isolated from those around you?	41.4%	How often do you see or talk to people you care about and feel close to? (positive response is <5 times/week)	72.1%
			Any concern for safety	20.5%
Intimate partner violence	Do you feel physically and emotionally safe?	17.7%	Do you feel physically and emotionally safe where you currently live?	11.2%
			In the past year have you been afraid of your partner/ex-partner?	13.9%

## CONCLUSIONS



A 3-question screener performed well for detecting any social need when compared to a validated screener, though detection for support needs was lower.



Lower specificity in our screener may be due to differences in how participants' perceptions of their own needs are incorporated into screening tools.



Short-form screeners may be an important strategy for improving uptake of screening and management of SDoH in routine care because of their scalability and acceptability.

## IMPLICATIONS



This screener has been made publicly available. Scan the QR code to learn more.

## CONFLICT OF INTEREST

This research was funded by Maven Clinic through the employment of authors. LRM, A. Plough, HJ, NH, CM, and NS hold positions at Maven Clinic and have equity in Maven Clinic, and A. Peahl and VP are paid consultants for Maven Clinic.