



Social Interventions Research & Evaluation Network

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Assessing and Improving Patients' Experiences During Phone-Based Social Needs Screening & Referral Interventions



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SIREN Research and Dissemination Series

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Accountable Health Communities (AHC) Model

AHC Eligibility:

Community dwelling Medicare & Medicaid beneficiaries accessing health care at participating clinical delivery sites

AHC Screening Tool:

1. Food insecurity
2. Housing instability & quality
3. Utility needs
4. Transportation needs
5. Interpersonal violence



AHC Model Implementation

- 28 “bridge” organizations implemented the AHC Model nationally
- **Oregon Rural Practice-based Research Network (ORPRN)**
 - Recruited clinical delivery sites to participate
 - Aligned partners to optimize community capacity to address needs
 - Responsible for data collection & management



<https://www.ohsu.edu/oregon-rural-practice-based-research-network>



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Study 1

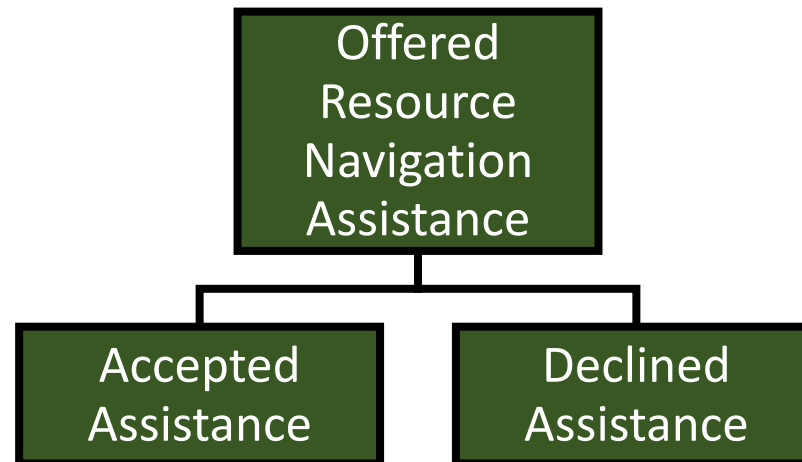
Steeves-Reece A, Davis M, Hiebert Larson J, Major-McDowall Z, King A, Nicolaidis C, Goldberg B, Richardson D, Lindner L. **Patients' willingness to accept social needs navigation after in-person vs. remote screening: a cross-sectional study.** *JABFM*.

<https://www.jabfm.org/content/jabfp/36/2/229.full.pdf>



Eligible Participants

- Participated in the AHC Model (10/2018 through 12/2020)
- Were offered resource navigation assistance



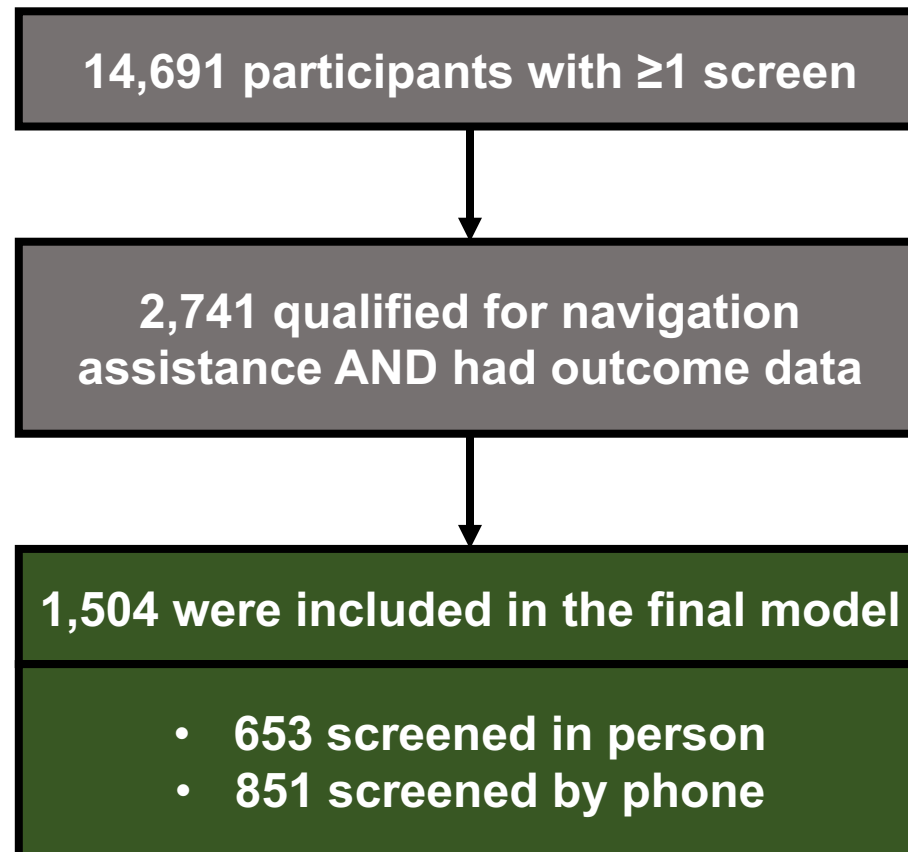
Analytic Approach

Testing whether two people presenting with the same number of social needs would be equally likely to accept navigation assistance whether they were screened in person or remotely.

Variable Name	Model	Variable Type
Willingness to Accept Social Needs Navigation	Dependent Variable	Binary
Interaction Term – Total # Social Needs + Screening Mode	Predictor Variables	Categorical
Total # of Social Needs – From 1 to 5		Ordinal
Screening Mode – In Person vs. Remote		Binary
Ethnicity	Confounding Variables	Binary
Race		Categorical
Sex		Binary
Rurality		Binary
Age		Categorical
Proxy		Categorical
Income		Categorical

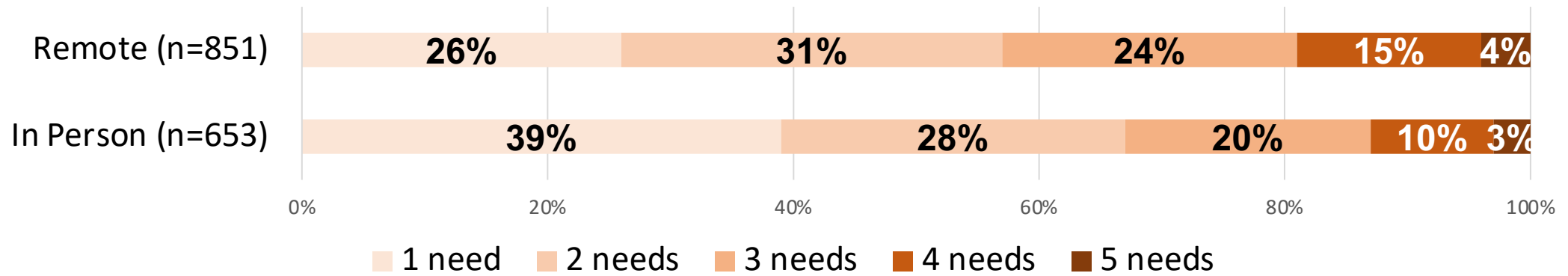
Study Sample – Medicare & Medicaid Beneficiaries

October 2018 through December 2020

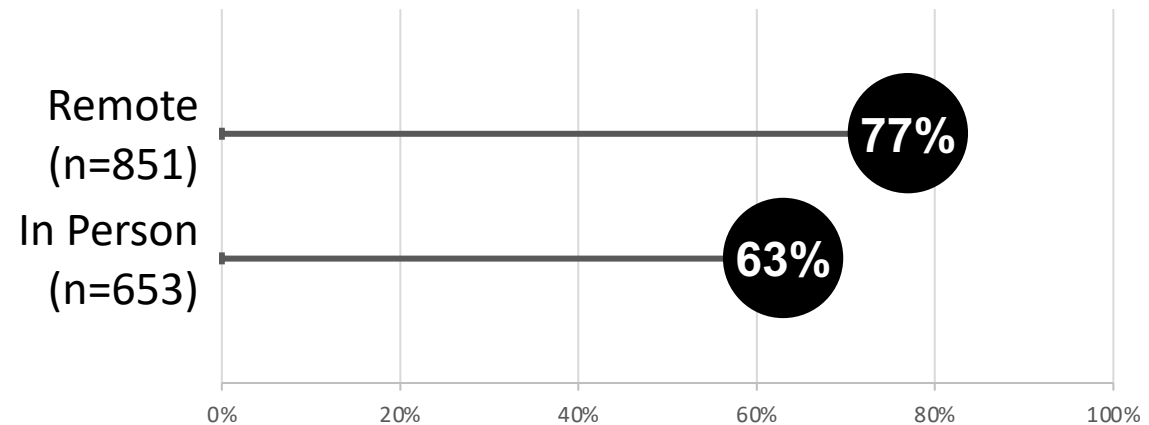


Social Needs & Navigation Acceptance (N=1,504)

Total # Social Needs

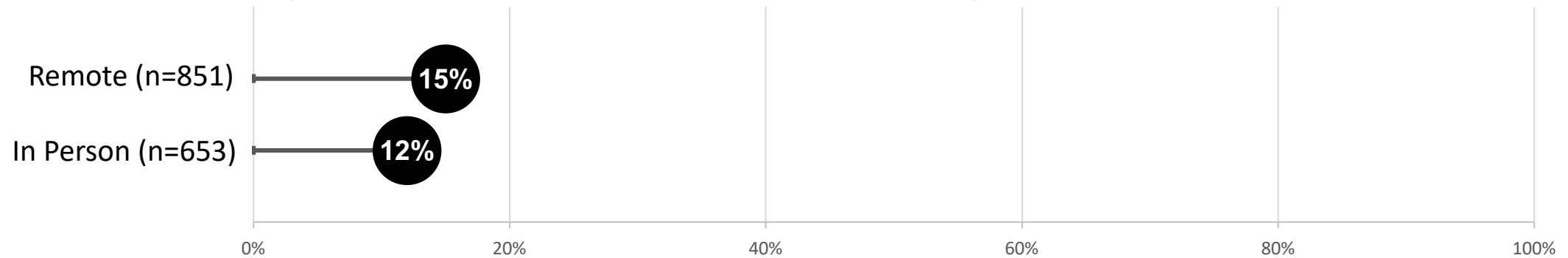


% Accepted Navigation Assistance

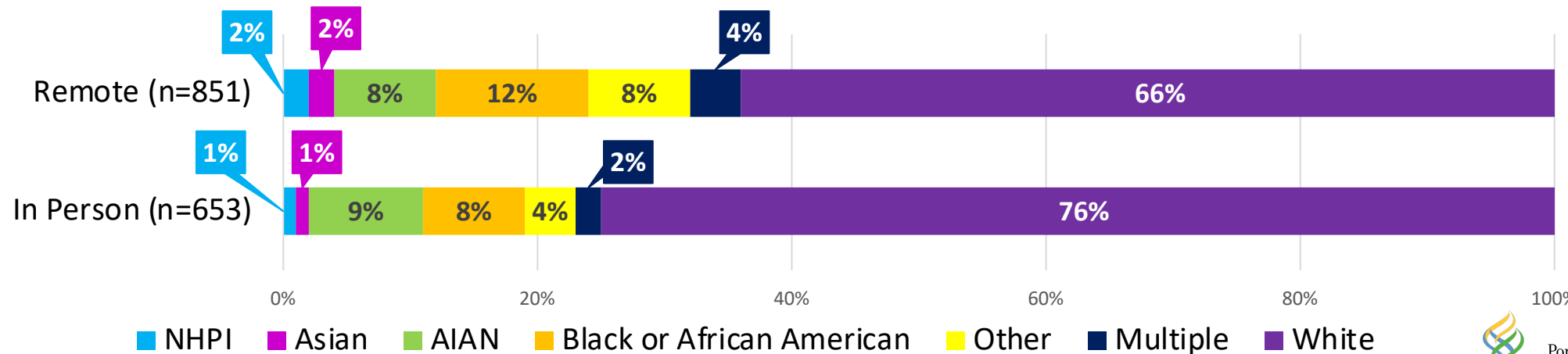


Ethnicity and Race (N=1504)

% Yes – Question: “Are you Hispanic, Latino/a, or of Spanish origin?”

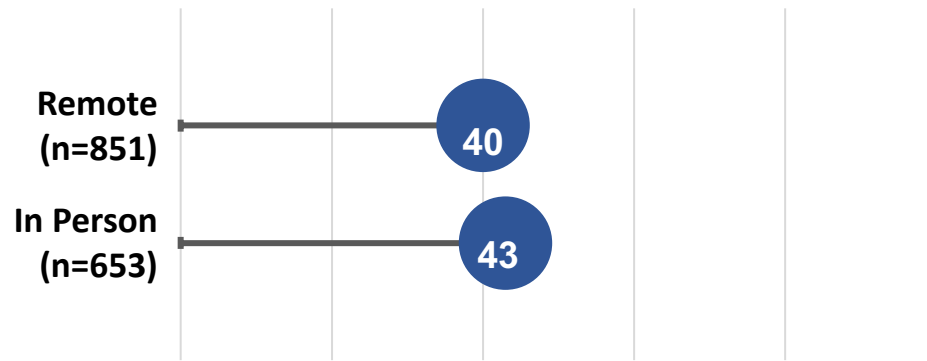


% Yes – Question: “Which one or more of the following would you say is your race?”

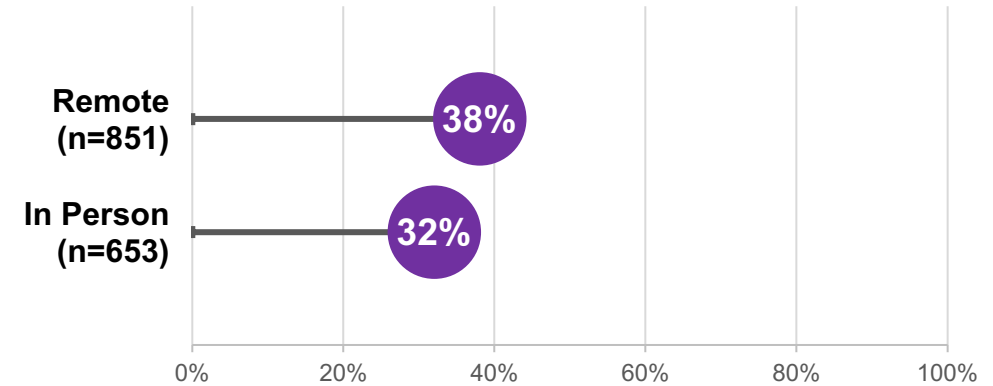


Additional Demographics (N=1,504)

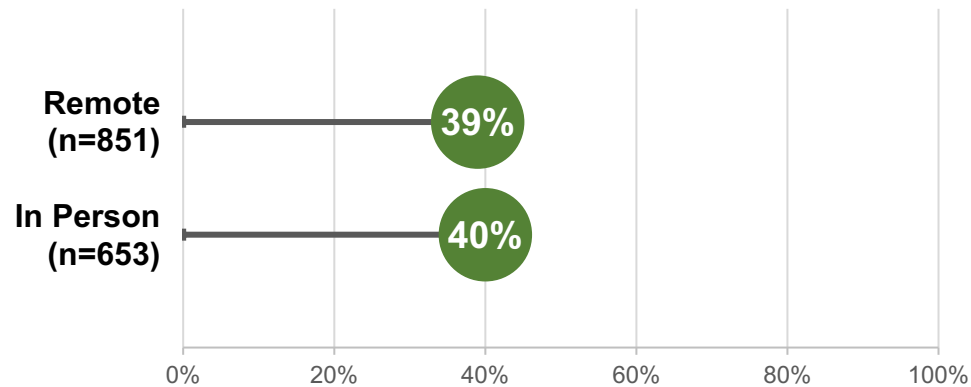
Mean Age



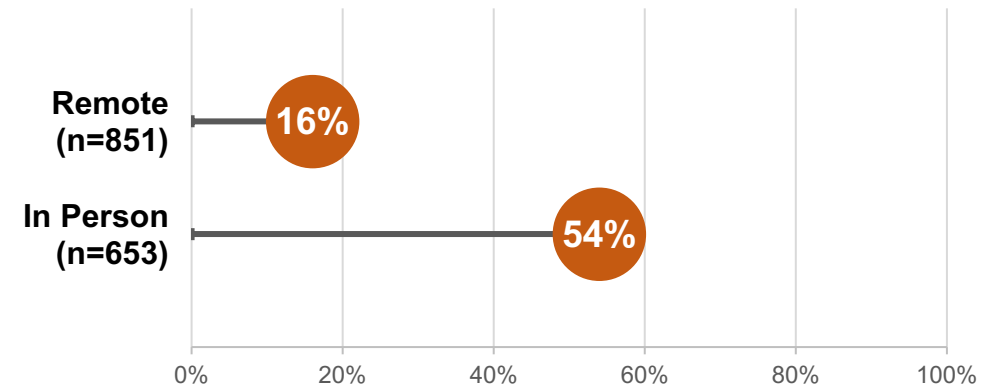
% Male



% Annual Household Income <\$10,000

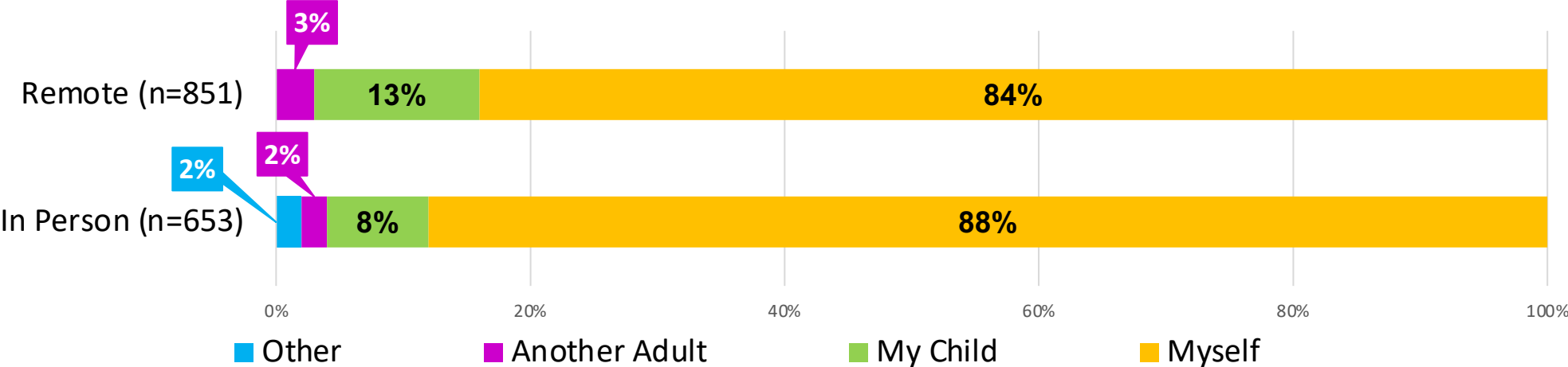


% Rural or Frontier



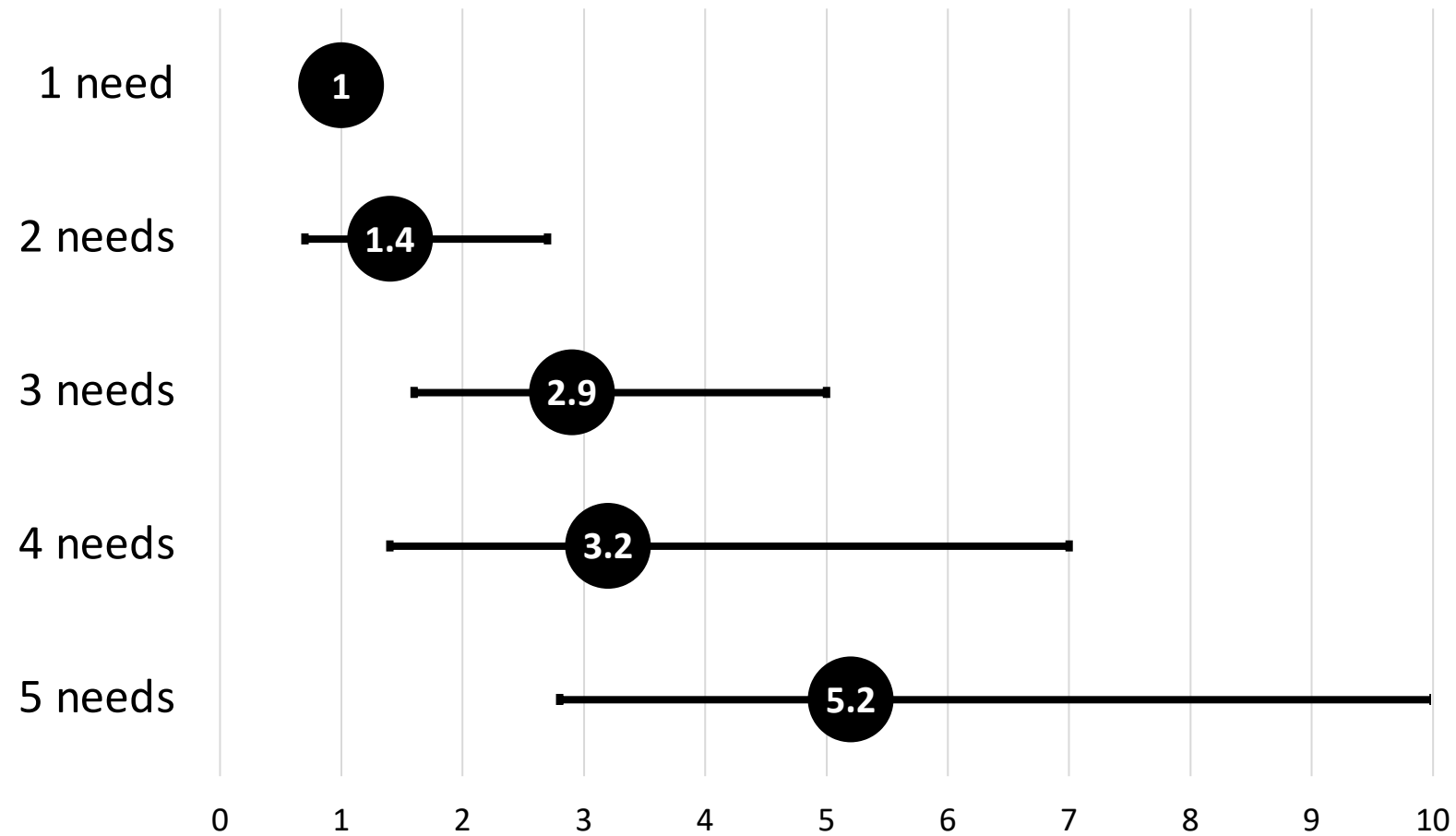
Additional Demographics

% Yes – Question: “I am answering this survey about...”



Logistic Regression Results

Adjusted OR of Accepting Navigation Given the # of Social Needs



Logistic Regression Results

Adjusted OR – Screening Mode & Interaction Terms

Variable	aOR (95% CI)	P value
Screening Mode		
In Person	1 [Reference]	NA
Remote	1.3 (.6 – 2.9)	.50
Interaction Term (Total # Social Needs * Screening Mode)		
1 need * remote	1 [Reference]	NA
2 needs * remote	.9 (.5 – 1.7)	.78
3 needs * remote	.5 (.3 – 1.0)	.06
4 needs * remote	1.3 (.5 – 3.4)	.60
5 needs * remote	.4 (.16 – 1.2)	.10

Conclusions & Implications for Practice

Healthcare organizations may...

- Screen patients for social needs remotely, knowing there is not evidence that doing so will adversely impact patients' willingness to accept navigation.
- Screen patients for social needs remotely, knowing that it may also have advantages from a health equity perspective.

However, remote screening may also have health equity disadvantages (e.g., for those with limited English proficiency and technological barriers).

Study 2

Steeves-Reece A, Nicolaidis C, Richardson D, Frangie M, Gomez-Arboleda K, Barnes C, Kang M, Goldberg B, Lindner S, Davis M.
**“It made me feel like things are starting to change in society:”
a qualitative study to foster positive patient experiences
during phone-based social needs interventions. *IJERPH*.**

<https://www.mdpi.com/1660-4601/19/19/12668>



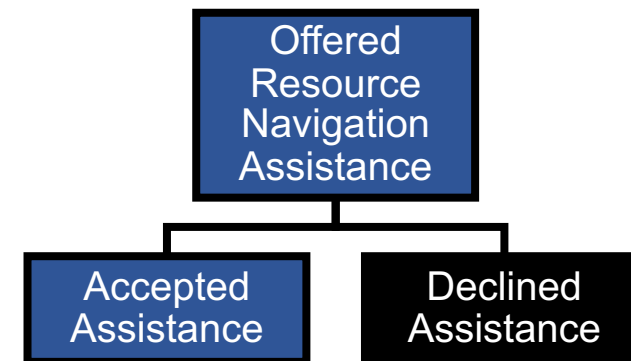
AHC Model Interviewees

Interviewees:

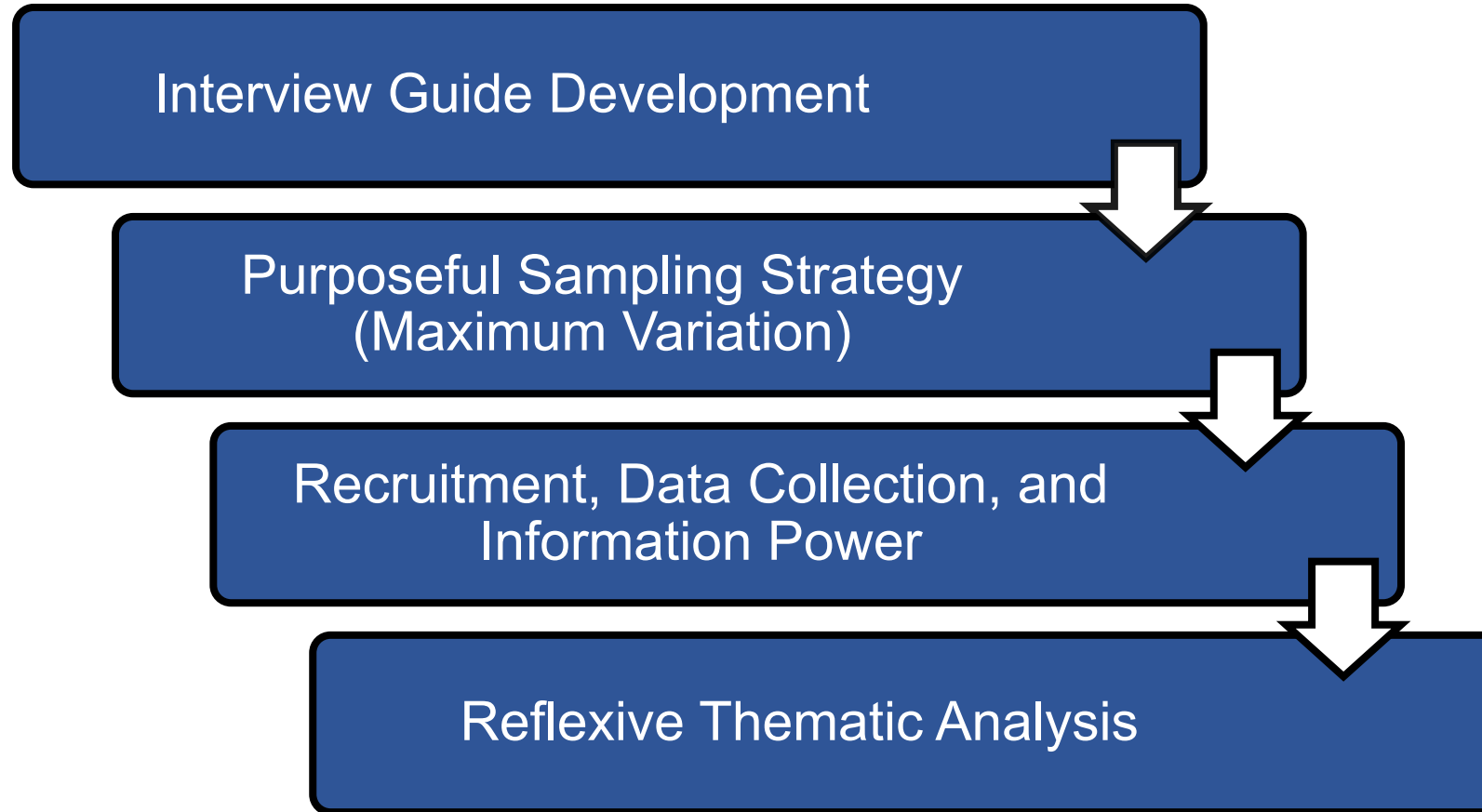
- Medicare & Medicaid Beneficiaries
- Participated in the AHC Model in Oregon
- Qualified for resource navigation assistance
- Accepted resource navigation assistance

Clinical Delivery Sites:

- Emergency Department & Federally Qualified Health Center
- Phone-based screening & referral



Pragmatic Qualitative Study



Interviewee Demographics (N=34)

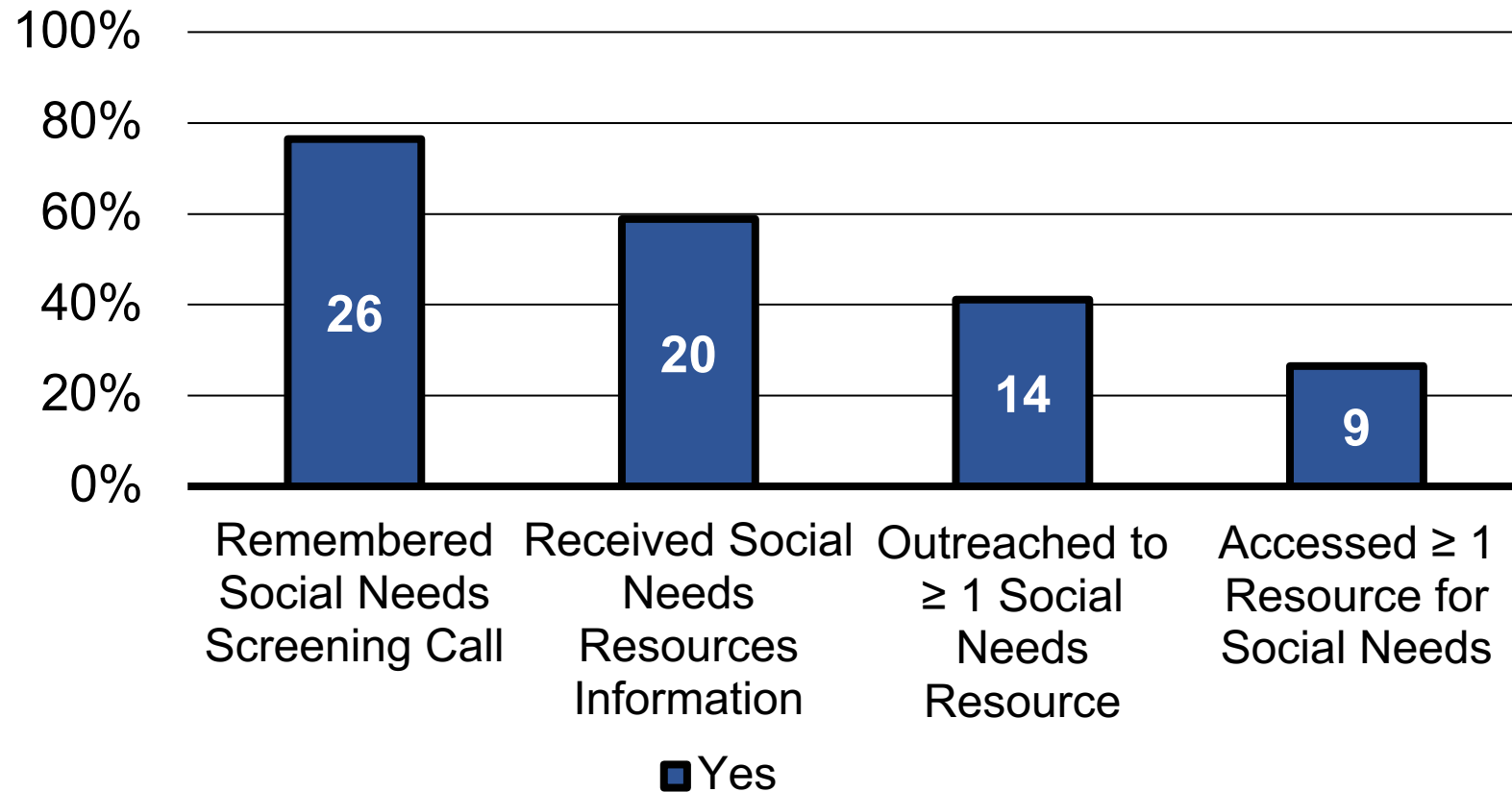
Race and Ethnicity (Combined)*	n (%)
American Indian or Alaska Native	2 (6%)
Asian	1 (3%)
Black or African American	5 (15%)
Hispanic, Latino/a, or of Spanish Origin	10 (29%)
Native Hawaiian or Other Pacific Islander	1 (3%)
White	17 (50%)
Other	7 (21%)
No Response	3 (9%)
Spanish Language Interview	n (%)
No	29 (35%)
Yes	5 (15%)

Sex	n (%)
Female	20 (59%)
Male	14 (41%)
Age	n (%)
<20	2 (6%)
20-29	7 (21%)
30-39	3 (9%)
40-49	4 (12%)
50-59	7 (21%)
>60	11 (32%)

Interviewee Social Needs (N=34)

Types*	n (%)
Food	27 (79%)
Housing	26 (76%)
Transportation	16 (47%)
Utilities	8 (24%)
Interpersonal Safety	3 (9%)
Quantity	n (%)
1	8 (24%)
2	10 (29%)
3	12 (35%)
4	4 (12%)
5	0 (0%)

Interviewees' AHC Model Outcomes (N=34)



Theme 1 – Patients were likely to be initially skeptical and/or have reservations about the social needs questions.

“I’m very inquisitive when it comes to that ... At first [I ask], ‘Where are you calling me from? Why are you calling me?’ Not just anyone is going to be helping a person. Sometimes they just do it to grab your information.”

45- to 54-year-old Hispanic female (translated from Spanish)

“With my daughter’s disability there was [Department of Human Services] involved quite a bit in our household. Maybe it would cause her more problems to admit to some of this stuff.”

65- to 74-year-old White female



Theme 2 – Immediate transparency and ongoing respect for autonomy were fundamental.

“It seemed like a scam at first, but because I know [the healthcare organization] and I’ve been going there since I was like two years old, I was like, ‘No, there’s no way it’s a scam.’”

<25-year-old White female

“I mean, I don’t want to be hassled if I tell them that everything is good ... If I’m not in a good place, I’ll ask them. I don’t want to be pressured or hassled.”

45- to 54-year-old Black male



Theme 3 – Showing kindness for the patient through one’s demeanor was important.

“The tone of voice she maintained the whole time was also really helpful ... Just maintaining maybe a soft, it doesn’t always have to be soft, but just like a calming [voice] ... It’s very stereotypical, but it does work.”

<25-year-old Hispanic female (a)

“She wasn’t very kind, too. Just quick and short ... The tone in her voice, it seemed like she was in a big hurry ... I had the feeling she didn’t have her morning coffee ... There was just no life and no concern, no personal interest in what she was saying.”

55- to 64-year-old White female



Theme 4 – Demonstrating a genuine intention to connect patients with resources mattered.

“As long as I think it’s gonna help me and not hurt me, I’m willing to answer the question.”

45- to 54-year-old American Indian or Alaska Native female

Interviewer: “Is it okay to ask [about social needs], even when help or resources cannot be guaranteed?” Interviewee: “It depends on the person. Look, there are times when, if they are going to help you, that’s fine! But if they are one of those people who doesn’t want to help, they will not explain it to you. Interviewer: “So, more like what are the intentions [of the person]?” Interviewee: “Yes.”

45- to 54-year-old Hispanic male (translated from Spanish)



Theme 5 – The degree of attentiveness & responsiveness to patient circumstances & requests impacted their experience.

“I’m just really anxious about stuff like that, especially in regards to paperwork and legal stuff, I would have been too afraid of doing it wrong.”

<25-year-old Hispanic female (b)

“Well, I told him, ‘I live in [County A], so do you [have] anything in [County A]?’ But they gave me the [number for County B] ... That’s the problem ... I don’t need [County B].”

45- to 54-year-old Asian male



Theme 6 – Patients could be left feeling appreciative or hopeful, whether they accessed resources or not.

“I was happy [to be asked the social needs screening questions] because it made me feel like things are starting to change in society ... I really felt important and like things are starting to change.”

25- to 34-year-old Hispanic female (Didn't Access Resources)

“The way that my situation was handled ... [it] went above and beyond what I needed even ... Honestly, I didn't know that it was something that healthcare organizations took care of. I mean, it's more of a well-being business, you know, as opposed to just health. And that's something that I didn't realize that you guys did.”

<25-year-old White male (Didn't Access Resources)



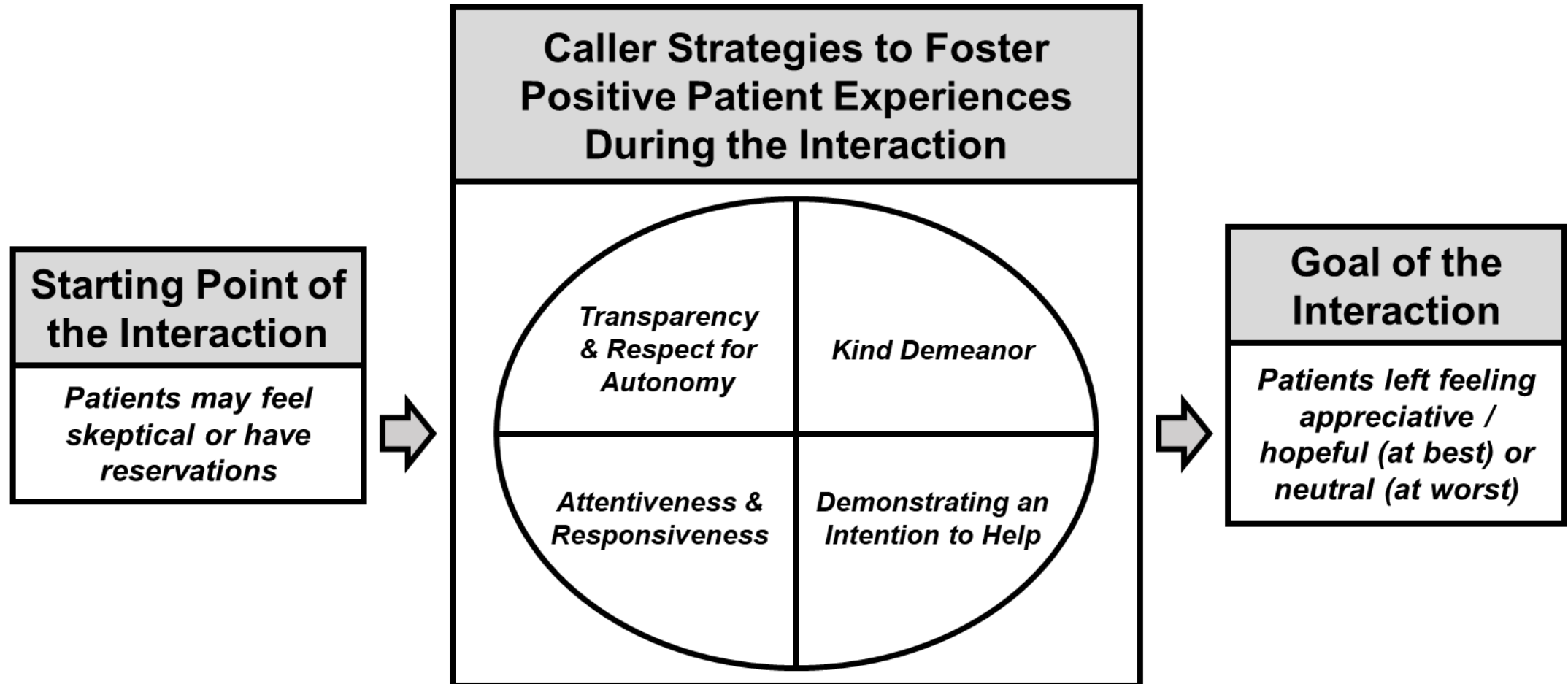
Theme 6 – Patients could be left feeling appreciative or hopeful, whether they accessed resources or not.

“It’s giving so much hope and kindness ... Because of COVID ... because of my heart condition and health condition ... I have to stay away from people, I don’t have the vaccine yet because of my heart and everything. So, I’m not as social as I used to be. And some people, their lights go dim. And you guys are like the lighthouse on the beach, saying, ‘Here’s the light, I’m trying to shine it to you.’”

45- to 54-year-old Multiracial female (Accessed Resources)



Framework for Fostering Positive Patient Experiences During Phone-based Social Needs Screening & Referral Interactions



Conclusions & Implications for Practice

Healthcare organizations may...

- Use our framework to train those who will be calling patients for social needs screening & referral interventions.
- Create conditions in which callers can do this work most effectively.



Thank you! Questions?

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