

# Comparing Communities Based on Population Density to Inform Meal Kit Intervention Recruitment of Families with Low Income

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slice & spice  
dinner time is family time



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## Abstract

**Background:** Best practice for community-based interventions includes partnering with community stakeholders for study design, implementation, and evaluation. Successful recruitment of families with low income into these studies requires an understanding of community characteristics, potential barriers to participation, and recruitment strategies. Local stakeholder advisory committees are critical for this process as community needs and residents differ.

**Objective:** To compare stakeholder perceptions of community characteristics and suggested recruitment strategies for participation in a healthy meal kit intervention for families with low income for three Florida communities (rural, suburban, and urban) with a high prevalence of food insecurity.

**Study Design, Settings, Participants:** Community stakeholders, referred by established partners, from rural (N=10), suburban (N=9), and urban (N=9) neighborhoods participated in six semi-structured focus groups and completed a demographic survey.

**Measurable Outcome/Analysis:** Meetings were audio-recorded, transcribed verbatim, coded, and categorized by two researchers to identify common themes. Perceived community characteristics and suggested recruitment strategies were compared using cross-tab analysis.

**Results:** Stakeholders (11 male, 16 female, 1 preferred not to answer) were 50.5±13.0 years old, primarily non-Hispanic (89.3%) and white (67.9%). All stakeholders work in their respective communities and resided (n=9) there for an average of 35.3±21.0 years. Most (60.7%) had never purchased a meal kit. A similar community characteristic theme across all three groups was financial instability, although both rural and urban participants identified difficulty accessing fresh fruits and vegetables (F/V). Suburban and urban participants described their communities as diverse in age, culture, and/or spoken languages. Rural and urban stakeholders discussed local initiatives to increase fresh F/V access while suburban and urban stakeholders highlighted intracommunity partnerships. Recruitment strategies were more similar than not. All stakeholders suggested connecting with media outlets, schools, and faith-based and community organizations. Rural and urban stakeholders suggested presentations on the study. Suburban stakeholders suggested partnering with government agencies.

**Conclusion:** Community-specific nuances should be considered when recruiting for a healthy, community-based meal kit intervention intended to increase access to healthy foods for families with low income.

## Background

Best practice for community-based interventions includes partnering with community stakeholders for study design, implementation, and evaluation. These collaborations are mutually beneficial as they encourage partnerships with diverse skills, knowledge, and expertise in addressing complex problems; improve research quality and validity by incorporating the local knowledge of those involved; and increase the likelihood of overcoming distrust of research within the community. [1] Successful recruitment and retention of families with low income into these studies requires an understanding of community characteristics, potential barriers to participation, and recruitment strategies. Local stakeholder advisory committees are critical for this process as community needs and residents differ.

## Objective

To compare stakeholder perceptions of community characteristics and suggested recruitment strategies for participation in a healthy meal kit intervention for families with low income for three Florida communities (rural, suburban, and urban) with a high prevalence of food insecurity.

## Study Design, Settings, Participants

Community stakeholders, referred by established partners, from rural (N=10), suburban (N=9), and urban (N=9) neighborhoods participated in six semi-structured virtual focus groups and completed a demographic survey. The USDA classifications of rural (population less than 2,500), urban clusters (suburban, population between 2,500 and 50,000), and urban areas (population greater than 50,000) were used to designate community types. [2]

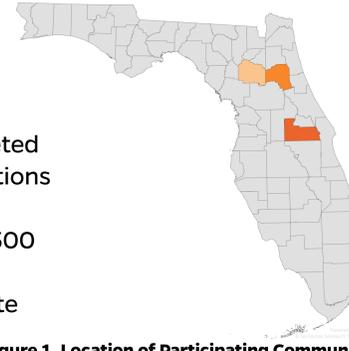


Figure 1. Location of Participating Communities

## Measurable Outcome/Analysis

Demographic data were analyzed using descriptive statistics via SPSS. Qualitative data were analyzed using an inductive thematic approach, as highlighted in Figure 2.

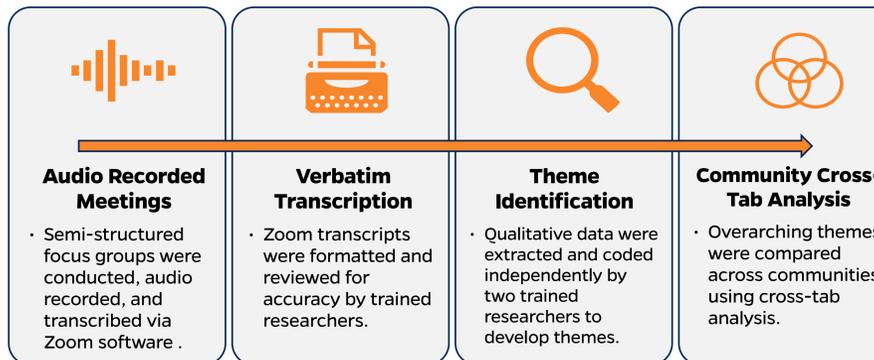


Figure 2. Data Analysis Using an Inductive Thematic Approach

## Results

Table 1. Participant Demographic Characteristics

Characteristic	Rural (n=10)	Suburban (n=9)	Urban (n=9)	Combined (n=28)
Gender, %				
Male	50.0	22.2	44.4	39.3
Female	50.0	77.8	44.4	57.1
Preferred not to answer	N/A	N/A	11.1	3.6
Ethnicity, %				
Non-Hispanic	90.0	100.0	77.8	89.3
Hispanic	10.0	N/A	22.2	10.7
Race, %				
White	90.0	66.7	44.4	67.9
Black/ African-American	10.0	22.2	33.3	21.4
Other	N/A	N/A	22.2	7.2
Not provided	N/A	11.1	N/A	3.6
Age (years; mean)	50.6±12.0	52.4±16.5	48.3±11.4	50.5±13.0
Primary Local Community Involvement				
School	7	4	4	15
Food Security Organizations	1	1	2	4
Food and Nutrition Education Programs	N/A	1	1	2
Local Government	2	N/A	N/A	2
Religious Organization	N/A	3	2	5
Local Community Residents	4	4	1	9
Years; mean	39.3±16.0	29.0±28.5	45.0	35.3±21.0
Meal Kit Purchase History, %				
No	40.0	88.9	55.6	60.7
Yes	60.0	11.1	44.4	39.3

## Results (continued)

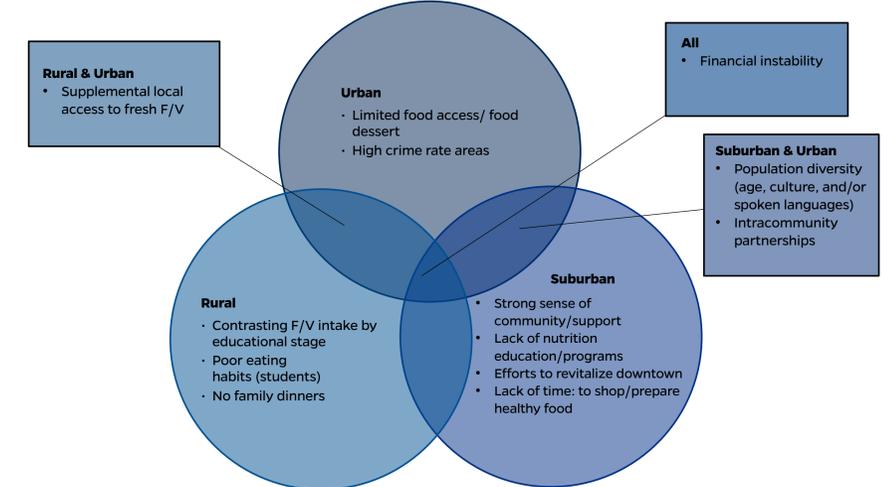


Figure 3. Comparison of Community Characteristics Themes

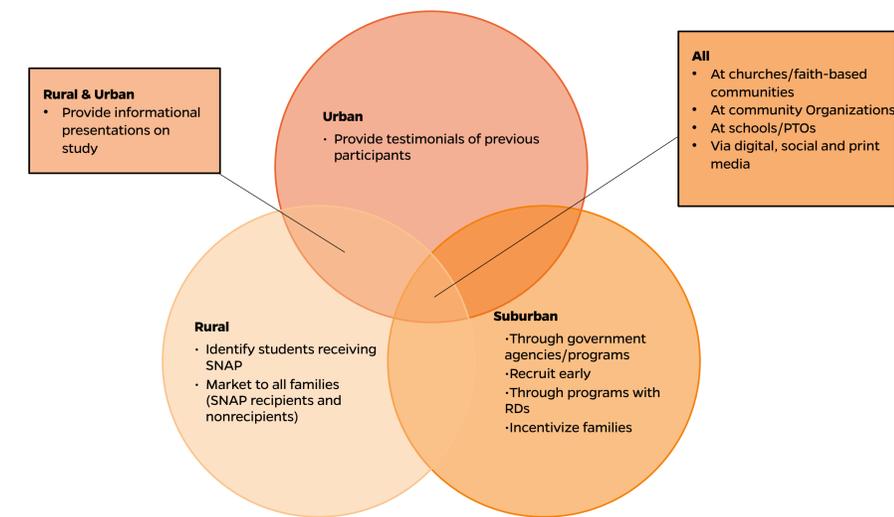


Figure 4. Comparison of Proposed Recruitment Strategy Themes

## Conclusions

While the communities shared several similarities, regardless of population density, community-specific characteristics and recruitment strategies are crucial to developing a program that meets the needs of each community. This formative research was considered as we developed and recruited for a healthy, community-based meal kit intervention intended to increase access to healthy foods for families with low income.

## References

[1] B. A. Israel, Amy J. Schulz, Edith Par, B., 2001. Community-based Participatory Research: Policy Recommendations for Promoting a Partnership Approach in Health Research. Education for Health: Change in Learning & Practice, 14(2), pp.182-197.  
[2] USDA Economic Research Service. n.d. USDA ERS - What is Rural?. [online] Available at: <https://www.ers.usda.gov/topics/rural-economy-population/rural-classifications/what-is-rural/> [Accessed 25 May 2022].