

## INTRODUCTION

Social determinants of health (SDOH) are nonclinical factors that influence health outcomes, including food insecurity, transportation barriers, and housing stability

- Medical care only 10%–15% to preventable mortality<sup>1</sup>
- Strategies for screening for adverse SDOH in primary care remains poorly defined
- **Project Setting:** ECU Family Medicine Center, Greenville/Pitt County, NC
  - 21% of Pitt County, NC is food insecure<sup>2</sup>, and
  - 14% of has diabetes and/or heart disease<sup>3</sup>

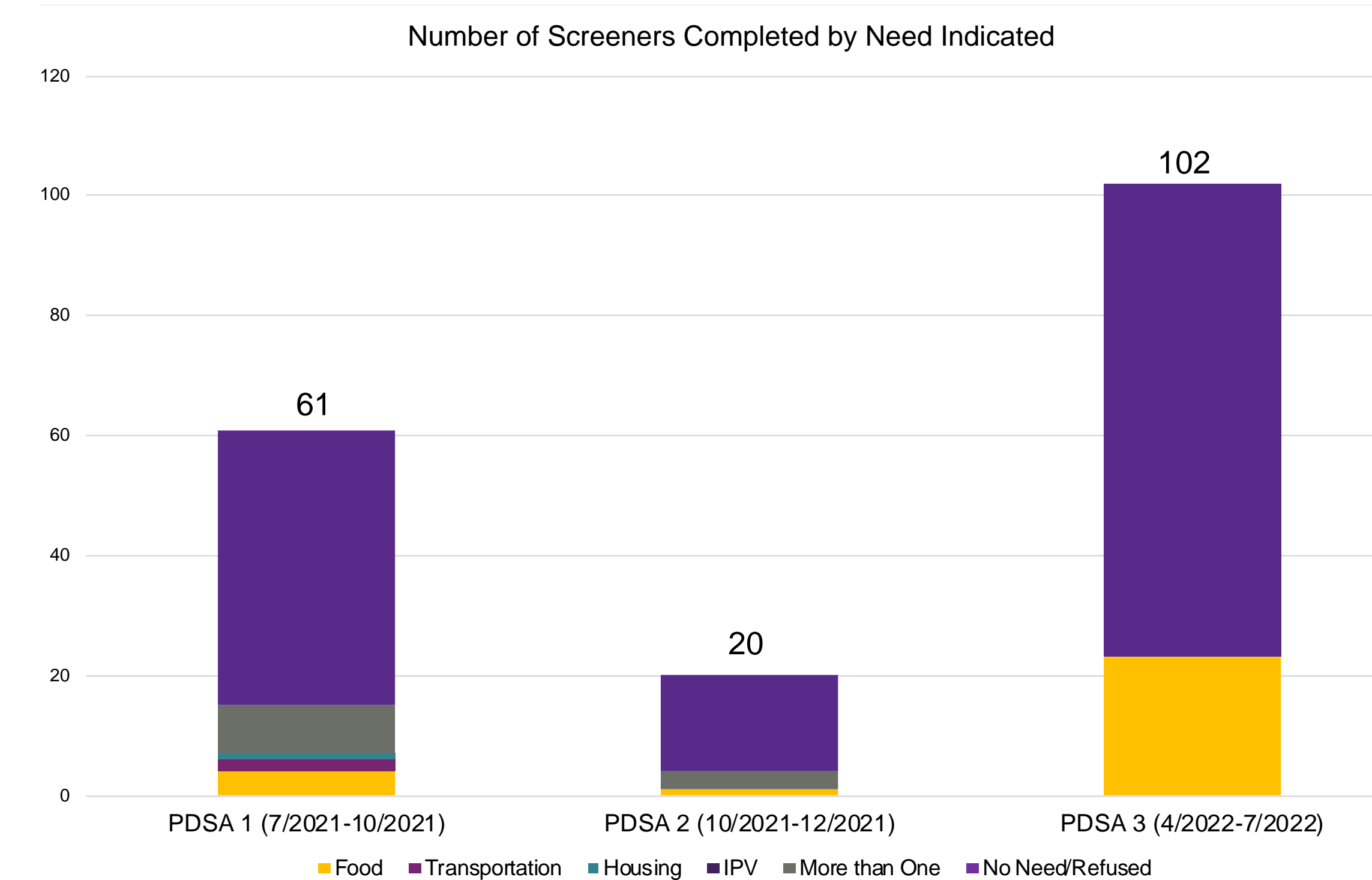
## AIM STATEMENT

- **Pilot test a SDOH screener in one module of the ECU Family Physicians; assess the feasibility and effectiveness of including a SDOH screener into the current clinic workflow**

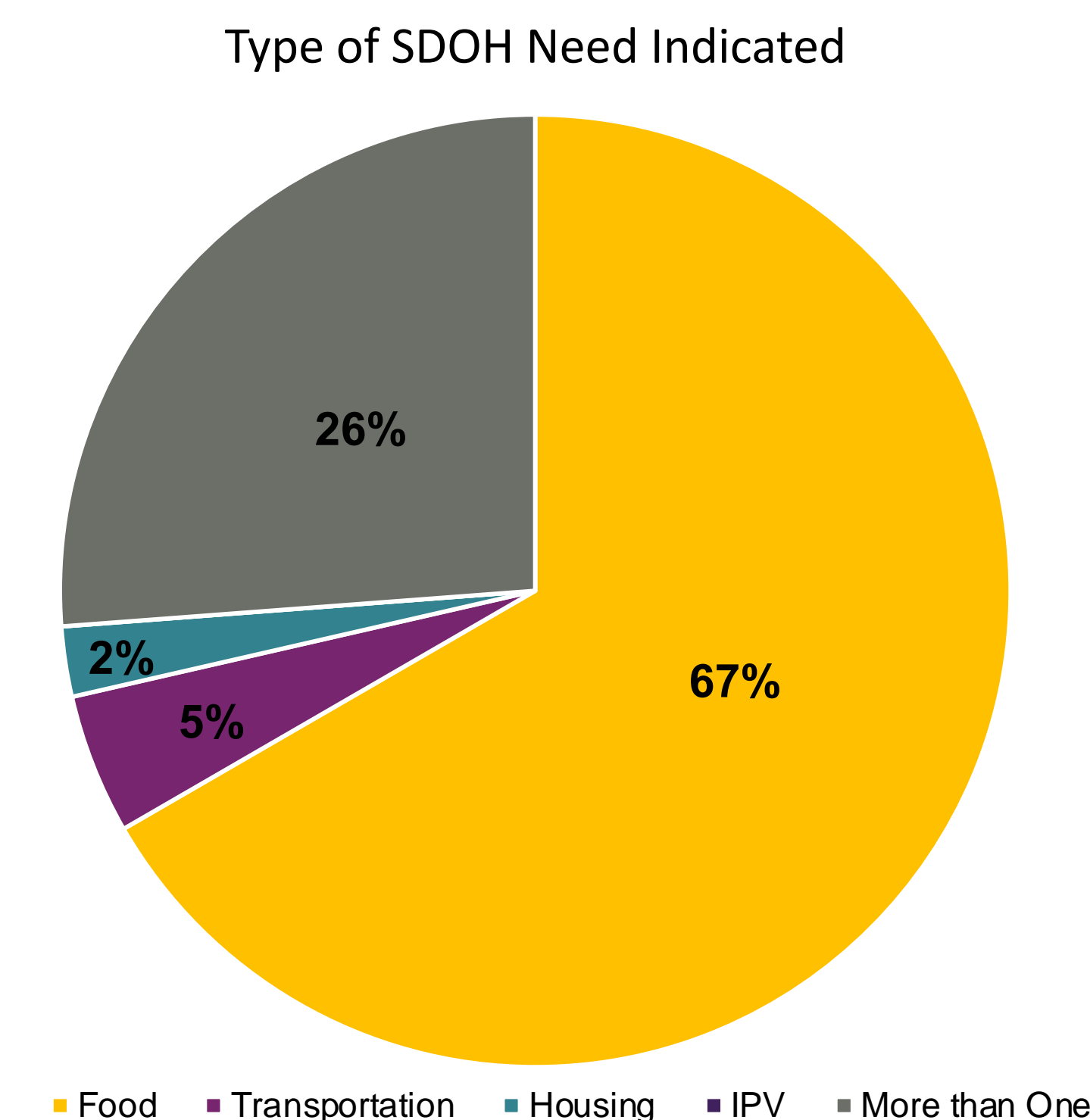
## METHODS

- Evaluated most appropriate time to implement the screener during the patient rooming process
- SDOH questions derived from EPIC; offered in either English or Spanish
- Adult patients used paper screening instrument with standardized questions
- **PDSA 1** (July 2021-Oct 2021) examined screener completion rates and identified patient endorsed needs
- **PDSA 2** (Oct 2021-Dec 2021) focused the sample to two physicians’ patient schedules
- **PDSA 3** (April 2022-July 2022) utilized a digital screener given in the exam room, focusing only on food insecurity of one physician’s patient panel

## OBSERVATIONS AND RESULTS

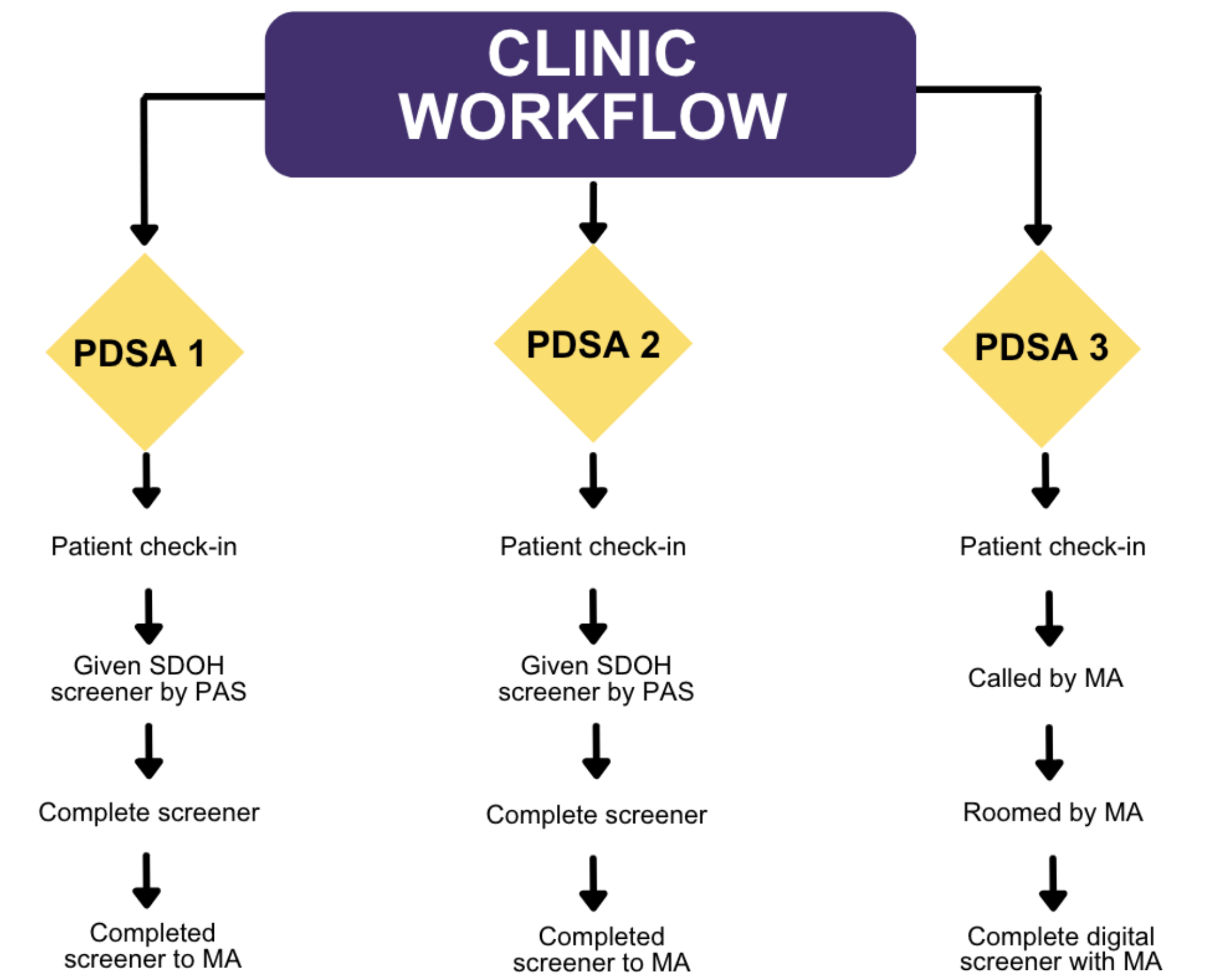


	Count	%
<b>Total participants</b>	183	
<b>Age</b>		
18-39 years	54	29.5%
40-59 years	71	38.8%
60->80 years	58	31.7%
<b>Race/Ethnicity</b>		
White, Non-Hispanic	51	27.9%
Black, Non-Hispanic	120	65.6%
Other/Unknown	12	6.5%
<b>Insurance Type</b>		
Medicaid	40	21.9%
Medicare	39	21.3%
Tricare	1	0.55%
Private	91	49.7%
Unk./Misc./None	12	6.6%



	Yes	No
<b>Food</b>		
1. Within the past 12 months, did you worry that your food would run out before you got money to buy more?		
2. Within the past 12 months, did the food you bought just not last and you didn't have money to get more?		
<b>Housing/ Utilities</b>		
3. Within the past 12 months, have you ever stayed: outside, in a car, in a tent, in an overnight shelter, or temporarily in someone else's home (i.e. couch-surfing)?		
4. Are you worried about losing your housing?		
5. Within the past 12 months, have you been unable to get utilities (heat, electricity) when it was really needed?		
<b>Transportation</b>		
6. Within the past 12 months, has a lack of transportation kept you from medical appointments or from doing things needed for daily living?		
<b>Interpersonal Safety</b>		
7. Do you feel physically or emotionally unsafe where you currently live?		
8. Within the past 12 months, have you been hit, slapped, kicked or otherwise physically hurt by anyone?		
9. Within the past 12 months, have you been humiliated or emotionally abused by anyone?		
<b>Optional: Immediate Need</b>		
10. Are any of your needs urgent? For example, you don't have food for tonight, you don't have a place to sleep tonight, you are afraid you will get hurt if you go home today.		
11. Would you like help with any of the needs that you have identified?		

Figure 1. Copy of SDOH Screening Questions



## CONCLUSIONS

- One out of four patients expressed adverse SDOH with food insecurity being most common. Nutritionist designed food bags and local food resource information provided.
- Challenges with pandemic-related staffing shortages reduced recruitment of patients requiring changes in workflow<sup>4</sup>
- Limitations impacting generalizability to other practices
  - Rural patient population
  - Public vs private insurance
  - Possible response bias

## RECOMMENDATIONS FOR ECU HEALTH

- Implementation of regular screening of patients for SDOH needs
- Increase provider training in disease management based on patient social needs
- Enhanced infrastructure for social workers/case managers to be available to connect patients to SDOH resources

## REFERENCES

1. McGinnis JM, Williams-Russo P, Knickman JR.
2. Addressing needs - foodbankcenc.org.
3. BRFSS 2020 - N.C. State Center for Health Statistics. Meyer AM, Davis M, Mays GP. Robin Rudowitz Follow @RRudowitz on Twitter RG. 10 things to know about Medicaid: Setting the facts straight. Kaiser Family Foundation.