



# Reducing Disparity Thru Food Insecurity Screening In Hospitalized Stroke Patients

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## BACKGROUND

- ❖ Food insecurity is associated with an increased likelihood for 10 major chronic illnesses, including stroke.
- ❖ Less than half of eligible adults over age 60 participate in federal nutrition assistance programs.
- ❖ Literature supports the usefulness and feasibility of a food insecurity screening tool in the clinical setting.
- ❖ Identified knowledge gap in prevalence of food insecurity among adult stroke patients at an academic center in San Bernardino County.

## OBJECTIVES

- ❖ Determine the prevalence of food insecurity among recruited adult stroke inpatients.
- ❖ Determine the patient's attitude on food insecurity screening.
- ❖ Understand the patient's perception of illness, nutrition habits, and self-efficacy for lifestyle changes to reduce stroke recurrence.
- ❖ Provide food resource for patients that screen as food insecure to reduce health disparity.

## METHODS

- ❖ A convenience sample of 30 recruited adult stroke inpatients in a Progressive Step Down Unit an academic center in San Bernardino County during February to March 2022.
  - ❖ **Inclusion:** Recruited adult stroke patients admitted with diagnosis of ischemic stroke, intracerebral hemorrhage, and/or transient ischemic attack without Language or cognitive deficit and/or family/next of kin able to respond on patient behalf.
- ❖ A validated and reliable two-item Hunger Vital Sign food insecurity screening tool along with patient perception of illness, nutrition habits, and self-efficacy and patient attitude on food insecurity screening was applied.
- ❖ Education handout was provided on federal and local resources for food assistance.

97% Sensitive & 83% Specific

## Hunger Vital Sign™

A validated tool to screen for food insecurity

Within the past 12 months, we worried whether our food would run out before we got money to buy more.

- Often true
- Sometimes true
- Never true

Within the past 12 months, the food we bought just didn't last and we didn't have money to get more.

- Often true
- Sometimes true
- Never true

A patient or family screens positive for food insecurity if the response is "often true" or "sometimes true" to either or both of these statements.



Learn more about screening for and addressing food insecurity in health care settings at [FRAC.org](http://FRAC.org)

- ❖ **Current Practice:** No standardized food insecurity tool screening is completed for stroke patients.

## RESULTS

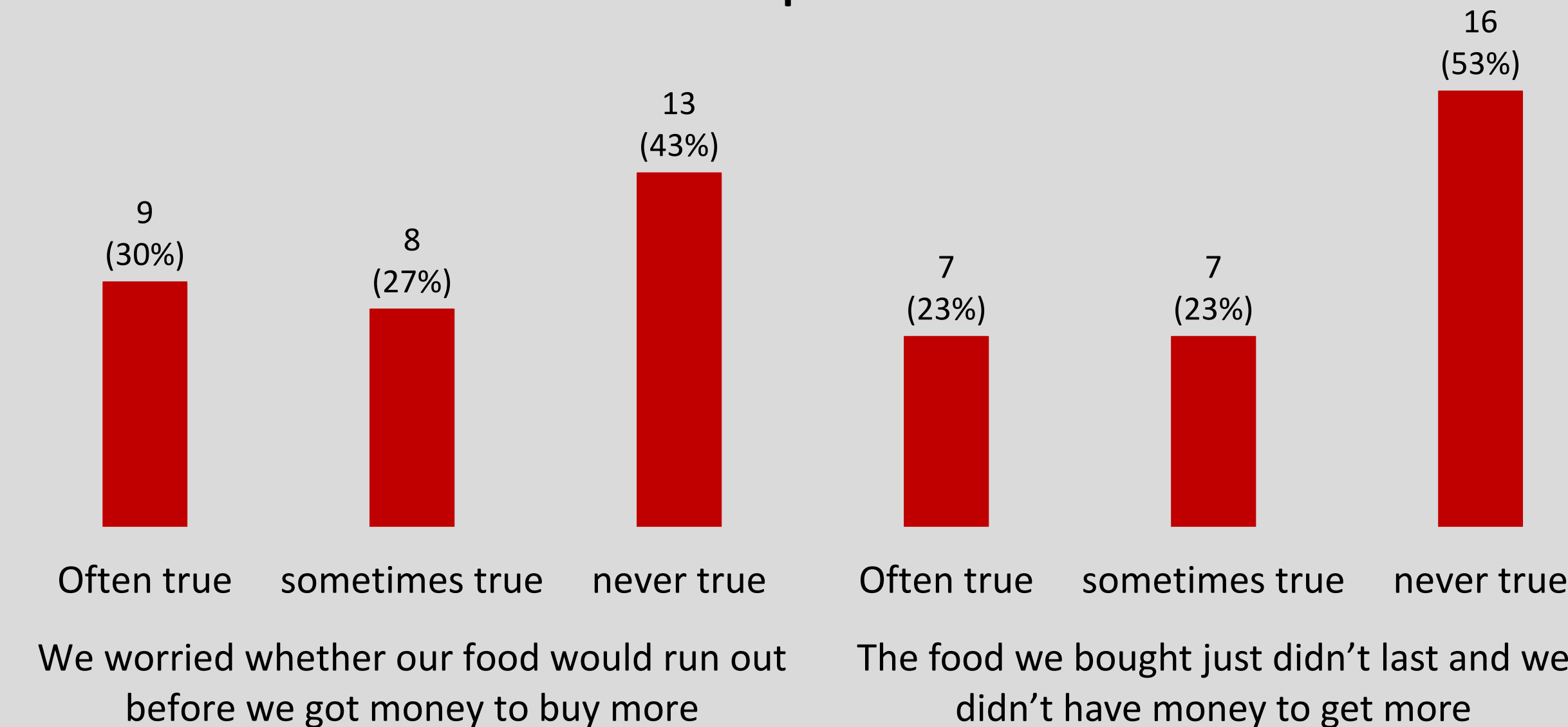
- ❖ 60% screened as positive for food insecurity.
- ❖ Total sample included, 60% with ischemic strokes, 33% with intracerebral hemorrhage, and 7% with transient ischemic attack.
- ❖ Co-morbidities included hypertension 87%, hyperlipidemia 53%, type 2 diabetes 33%, and heart failure 23%.
- ❖ Prior to hospital admission, 50% of screened patients made an effort to reduce the amount of fat in their diet and 73% made an effort to increase vegetable consumption.

### Characteristics of Patients Identified as Food Insecure

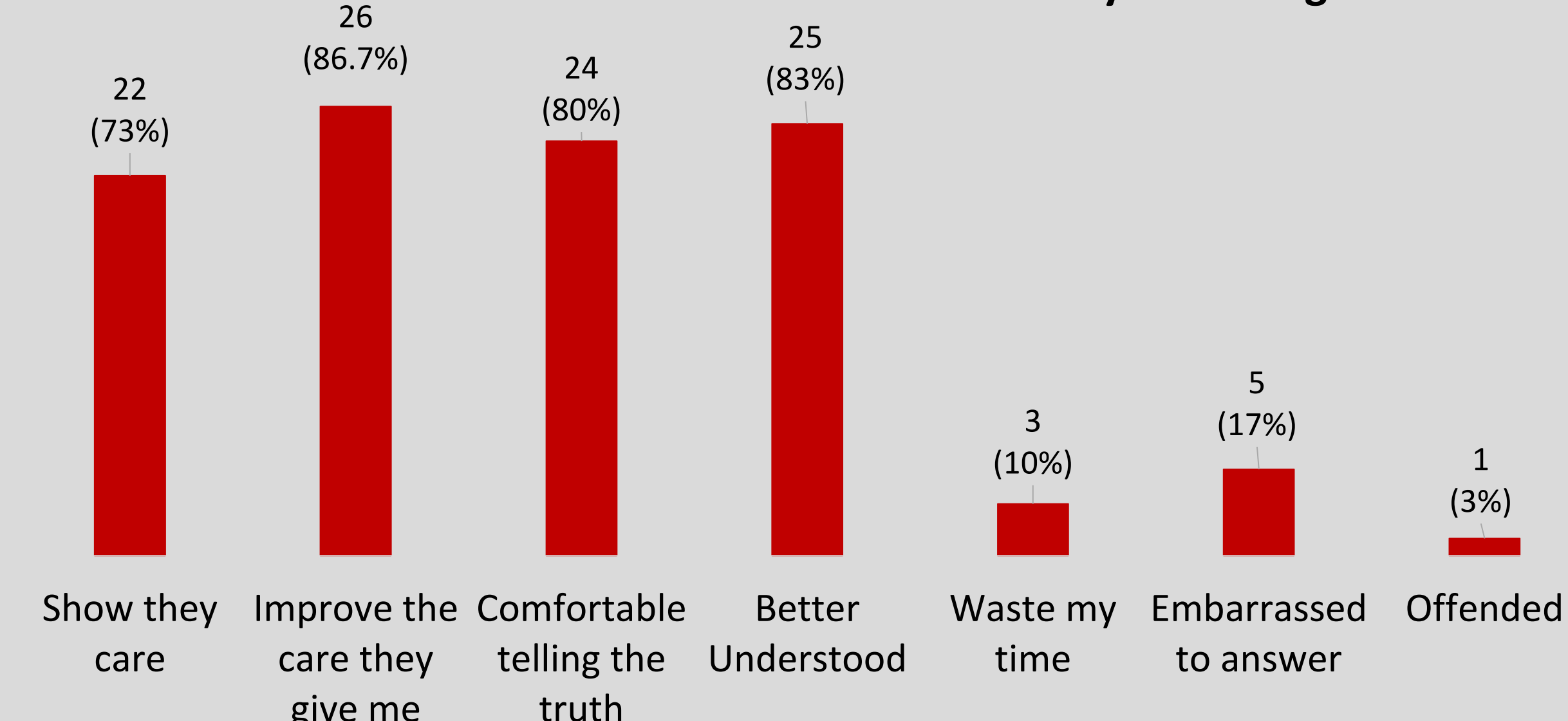
|                             |                          |        |
|-----------------------------|--------------------------|--------|
| Modified Diet for Dysphagia | Yes                      | 55.6%  |
| NIHSS Category              | Moderate or severe       | 72.22% |
| GCS Category                | Moderate Head Injury     | 11.1%  |
| Sex                         | Male                     | 66.7%  |
| Marital Status              | Not Married              | 52.94% |
| Discharge Disposition       | Home                     | 33.3%  |
| Principal Payer Type        | Medicare                 | 22.2%  |
| Stroke Type                 | Intracerebral Hemorrhage | 38.9%  |
|                             | Ischemic                 | 61.1%  |

### Hunger Vital Sign:

Within the past 12 months...



### Patient Attitude of Food Insecurity Screening



## IMPLICATIONS FOR PRACTICE

- ❖ A 2-item Hunger Vital Sign screening tool allowed for quick identification and intervention of food insecurity in the adult stroke inpatient population.
- ❖ Nursing can assist with utilizing the multidisciplinary team to best support the patient and provide empowering discharge education to reduce health disparity.

## STRENGTHS/AREAS FOR IMPROVEMENT

- ❖ **Strengths:**
  - Patient willingness to participate .
  - Two item screening tool was easy to administer and well understood among diverse culture/populations.
- ❖ **Challenges:**
  - Use of convenience sampling and small sample size may lead to bias.
  - Potential withholding of accurate responses by the patient to food insecurity screening questions due to sensitive nature of questions.
  - COVID surges leading to disaster status on the implementation unit leading to reduced staff availability for education and participation.

## NEXT STEPS

- ❖ Use of the electronic health record for food insecurity documentation to allow for outpatient follow-up and long term monitoring.
- ❖ Dissemination of project results for widespread application of food insecurity screening in all departments.

## REFERENCES



## CONTACT INFORMATION

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