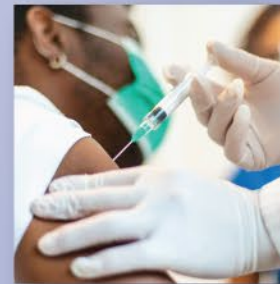


Making it Work: Practical Solutions to Health Equity for Hospitals (1)

Temi Olafunmiloye, Health Quality Innovators

Bruce Spurlock, Cynosure Health



Widening the Health Equity Lens with Supplemental Data

Temi Olafunmiloye
Manager, Health Equity
Health Quality Innovators (HQI)

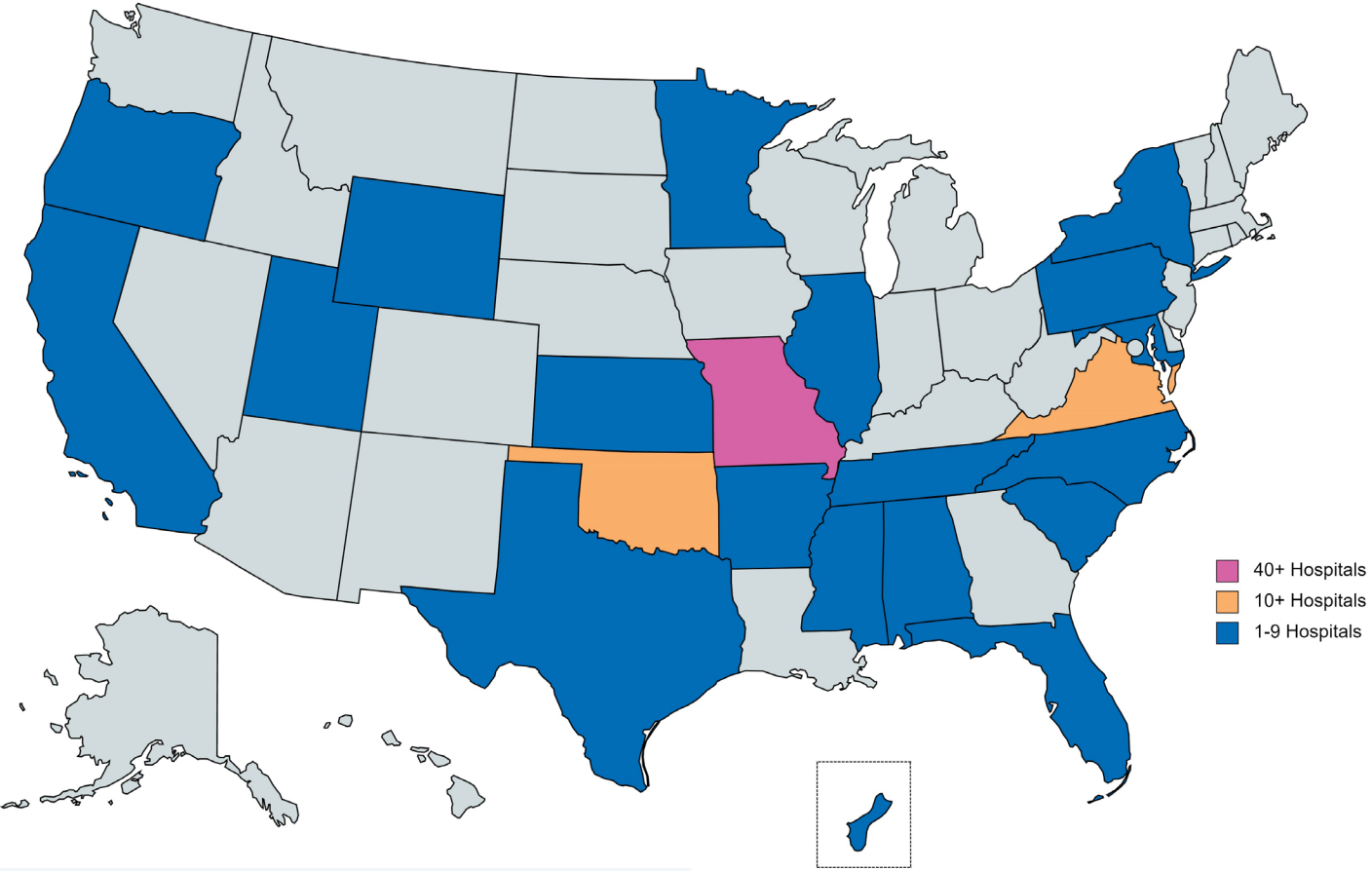




AGENDA (1)

- HQI and HQIC Overview
- Health Equity Focus and Analysis
- Supplemental Data: HQI's Quarterly Disparities Reports
- Hospitals in Action

About HQI



Hospital Distribution

- 23 States
- 59 CAHs
- 60 Acute Care
- 71 Rural

HQIC Priority Areas



Health Equity Focus (1 of 2)



Reducing
Health
Disparities

- Assess and implement a way to systematically collect Race, Ethnicity, Age, and Language (REAL) data at the point of care
- Use the patient voice to highlight strategies to reduce health disparities



5

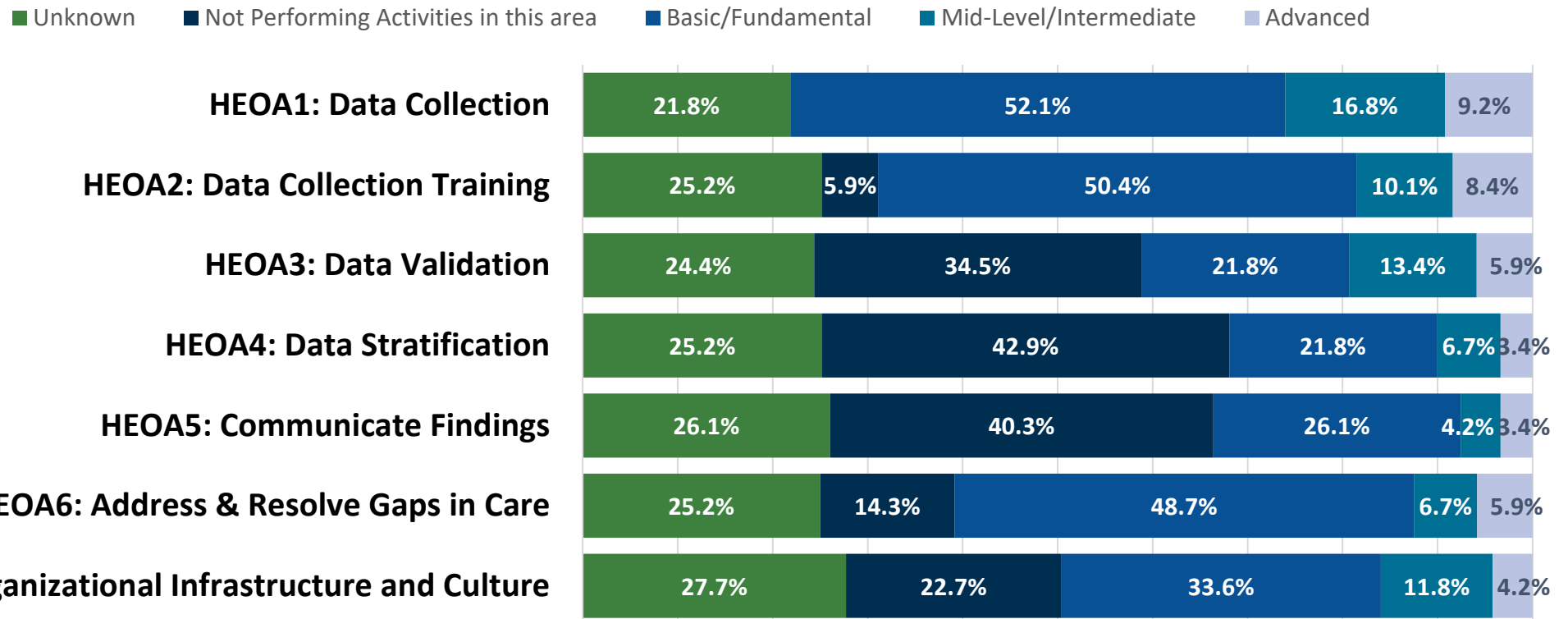
Health Equity Focus (2 of 2)



- Launched Health Equity Organizational Assessment
 - Data Collection
 - Data Collection Training
 - Data Validation
 - Data Stratification
 - Communicate Findings
 - Address and Resolve Gaps in Care
- Produced Quarterly Disparities Reports

Health Equity Organizational Analysis

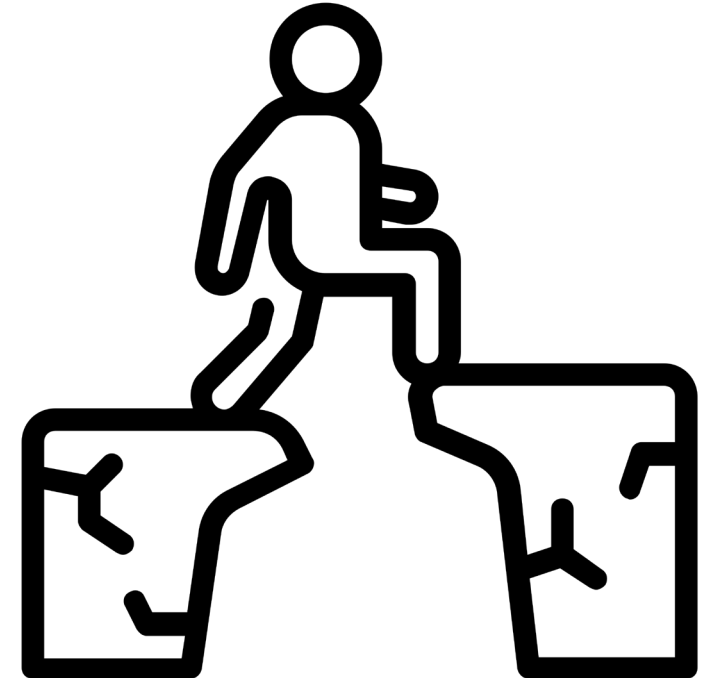
Percentage of Hospitals Reporting HEOA Performance by Category



Addressing Disparities Challenges

HQIC hospitals
lacked motivation to
address equity due
to being in non-
diverse areas

Small hospitals with
low harm rates saw
few disparities



Addressing Disparities Solutions

Broaden
understanding of
health equity

Reassess disparities
data to highlight
disproportionately
represented
populations



Reconceptualizing Health Equity

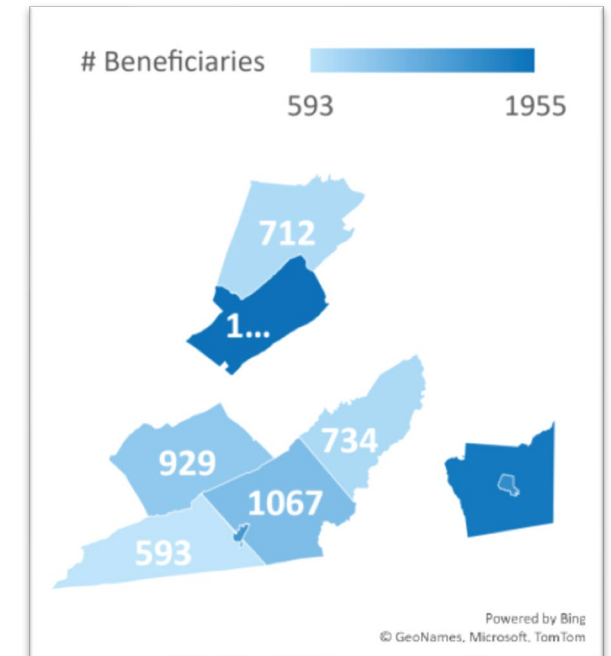


Hospital Catchment Area

Timeframe: **Oct-21 - Sep-22**

| County, State | Your Hospital | | 2020 Medicare Geographic Variation | | | | | |
|-----------------------|-----------------|-----------------|------------------------------------|--------|----------------|-------|----------|-------|
| | | | Gender | | Race/Ethnicity | | | |
| | # Beneficiaries | % Beneficiaries | Male | Female | White | Black | Hispanic | Other |
| GILES, VA | 1955 | 13.4% | 45.4% | 54.6% | - | - | - | - |
| HENRY, VA | 1852 | 12.7% | 44.3% | 55.7% | 82.9% | 15.3% | 0.5% | 1.3% |
| MARTINSVILLE CITY, VA | 1626 | 11.2% | 42.7% | 57.3% | 63.7% | 33.3% | 1.0% | 2.0% |
| FRANKLIN, VA | 1509 | 10.4% | 47.4% | 52.6% | 92.2% | 4.8% | 0.5% | 2.5% |
| GALAX CITY, VA | 1498 | 10.3% | 42.8% | 57.2% | 92.7% | 4.6% | 1.3% | 1.5% |
| CARROLL, VA | 1067 | 7.3% | 46.6% | 53.4% | 97.9% | 0.3% | 0.2% | 1.5% |
| WYTHE, VA | 929 | 6.4% | 45.5% | 54.5% | 95.8% | 2.1% | 0.3% | 1.9% |
| FLOYD, VA | 734 | 5.0% | 46.4% | 53.6% | 95.0% | 1.8% | 0.4% | 2.9% |
| MONROE, WV | 712 | 4.9% | 48.7% | 51.3% | - | - | - | - |
| GRAYSON, VA | 593 | 4.1% | 47.2% | 52.8% | - | - | - | - |

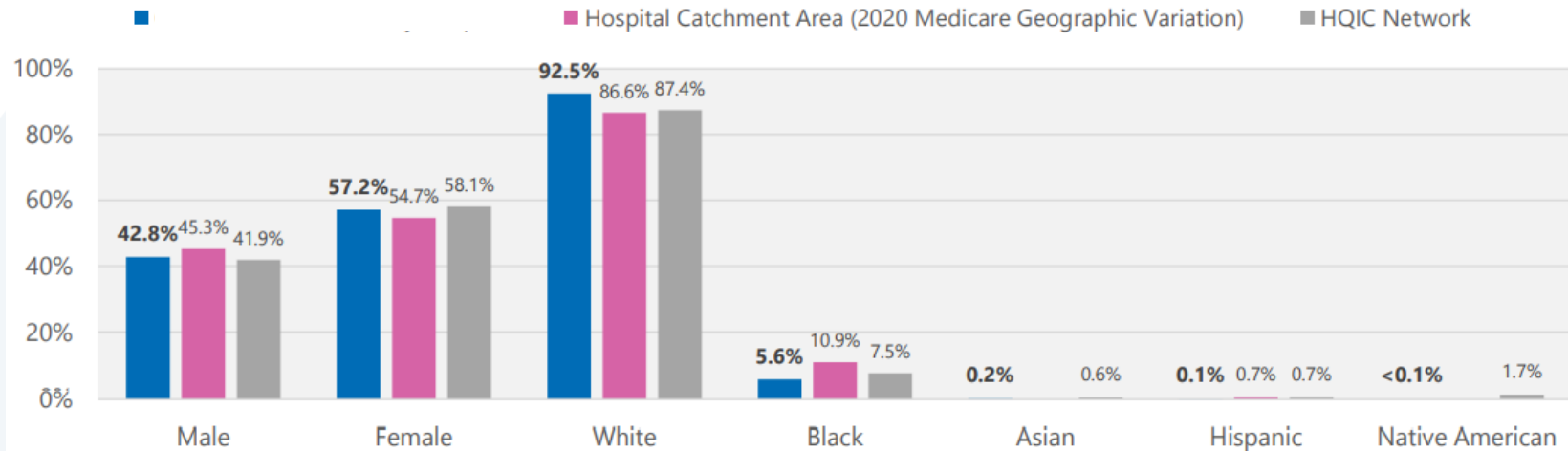
| | Gender | | Race/Ethnicity | | | |
|---|--------------|--------------|----------------|--------------|-------------|-------------|
| | Male | Female | White | Black | Hispanic | Other |
| Estimated Distribution for Your Hospital's Catchment Area* | 45.3% | 54.7% | 86.6% | 10.9% | 0.7% | 1.9% |



Beneficiary Demographics

| Demographic Category | All | Gender | | Race/Ethnicity | | | | |
|--|--------|--------|--------|----------------|-------|-------|----------|-----------------|
| | | Male | Female | White | Black | Asian | Hispanic | Native American |
| # of Beneficiaries served as inpatient or outpatient | 14,518 | 6,215 | 8,303 | 13,422 | 809 | 26 | 12 | <10 |
| % of Beneficiaries served | - | 42.8% | 57.2% | 92.5% | 5.6% | 0.2% | 0.1% | <0.1% |
| % of Beneficiaries in Hospital Catchment Area | - | 45.3% | 54.7% | 86.6% | 10.9% | - | 0.7% | - |
| HQIC Network | - | 41.9% | 58.1% | 87.4% | 7.5% | 0.6% | 0.7% | 1.7% |

Beneficiary Demographics (Timeframe: Sep-22)



Patient Distribution Across Each Harm Area

| Demographic Category | All | Gender | | Race/Ethnicity | | | | |
|--|--------|--------|--------|----------------|-------|-------|----------|-----------------|
| | | Male | Female | White | Black | Asian | Hispanic | Native American |
| # of Beneficiaries served as inpatient or outpatient | 11,827 | 4,869 | 6,958 | 9,548 | 1,976 | 25 | 17 | <10 |
| % of Beneficiaries served | - | 41.2% | 58.8% | 80.7% | 16.7% | 0.2% | 0.1% | <0.1% |
| % of Beneficiaries in Hospital Catchment Area | - | 46.4% | 53.6% | 82.4% | 14.2% | - | 0.8% | - |
| HQIC Network | | 41.9% | 58.1% | 87.4% | 7.5% | 0.6% | 0.7% | 1.7% |

| HQIC Measure | All Harms (n) | Gender | | Race/Ethnicity | | | | |
|-------------------------|---------------|--------|--------|----------------|-------|-------|----------|-----------------|
| | | Male | Female | White | Black | Asian | Hispanic | Native American |
| 30-Day Readmissions | 247 | 51% | 49% | 74% | 25% | 0% | 0% | 0% |
| 30-Day Sepsis Mortality | 91 | 53% | 47% | 66% | 32% | 0% | 0% | 0% |
| Pressure Ulcers | <10 | | | | | | | |
| Perioperative PE/DVT | <10 | | | | | | | |
| Postoperative Sepsis | 0 | | | | | | | |
| Fall-related Injuries | <10 | | | | | | | |
| Anticoagulant ADEs | <10 | | | | | | | |
| Hypoglycemic ADEs | 0 | | | | | | | |
| Opioid ADEs | <10 | | | | | | | |

Black patients comprised 16.7% of beneficiaries served, yet are 25% of readmissions and 32% of 30-day sepsis mortality

Social Vulnerability Index (SVI)

- **Social Vulnerability:** External factors that can negatively impact a community's health

Overall Vulnerability

| Socioeconomic Status | Household Composition & Disability | Minority Status & Language | Housing & Transportation |
|---|---|--|---|
| <ul style="list-style-type: none"> • Below poverty • Unemployed • Income • No high school diploma | <ul style="list-style-type: none"> • Aged 65 or older • Aged 17 or younger • Civilian with a disability • Single-parent household | <ul style="list-style-type: none"> • Minority • Speak English "less than well" | <ul style="list-style-type: none"> • Multi-unit structures • Mobile homes • Crowding • No vehicle • Group quarters |

Scoring

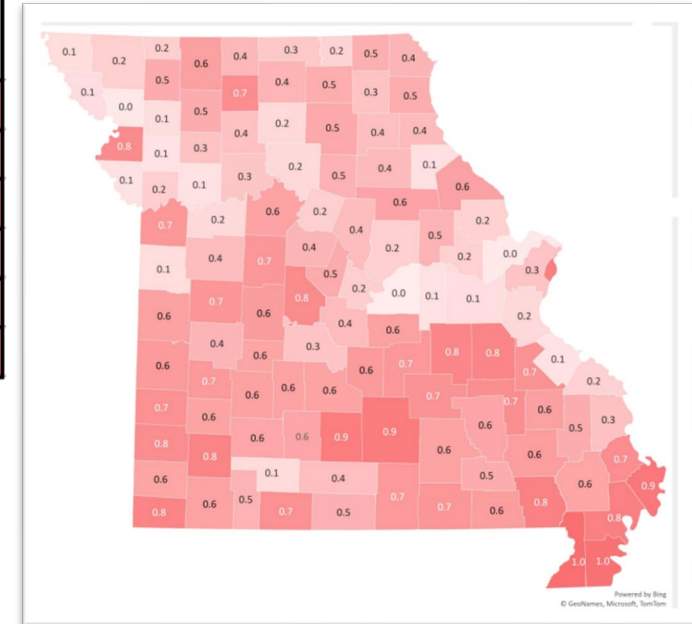
| | | | | |
|------------------------|--------------------|-------------------------|---------------------|-------------------------|
| Very Low (0.0-0.19) | Low (0.20-0.39) | Moderate (0.40-0.59) | High (0.60-0.79) | Very High (0.80-1.0) |
|------------------------|--------------------|-------------------------|---------------------|-------------------------|



Using SVI Data

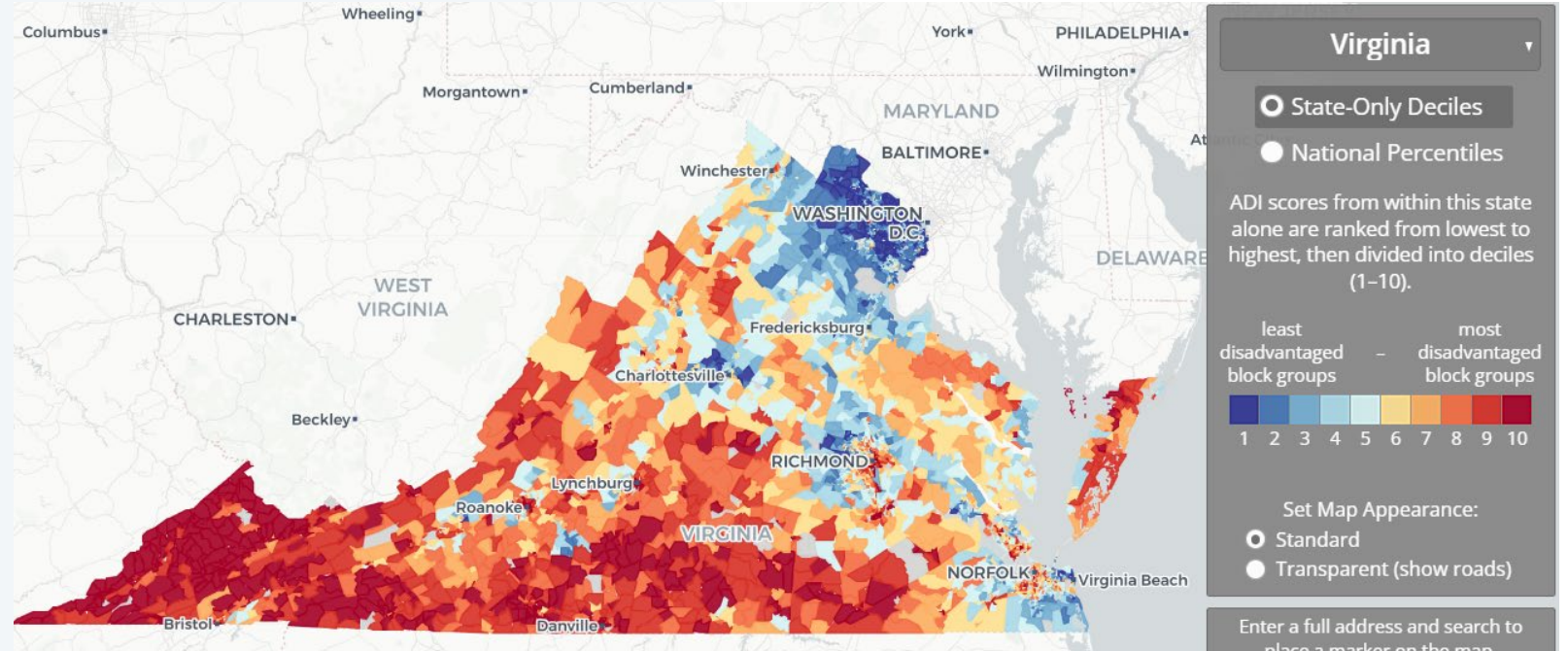
| County, State | Your Hospital | | Social Vulnerability Indices (SVI) | | | | Overall Ranking |
|---------------|-----------------|-----------------|------------------------------------|------------------------------------|----------------------------|-------------------------------|-----------------|
| | # Beneficiaries | % Beneficiaries | Socio-economic | Household Composition & Disability | Minority Status & Language | Housing Type & Transportation | |
| BARTON, MO | 1067 | 66.6% | 0.9036 | 0.8052 | 0.2508 | 0.3431 | 0.7279 |
| VERNON, MO | 188 | 11.7% | 0.6496 | 0.7699 | 0.1655 | 0.6127 | 0.6400 |
| JASPER, MO | 118 | 7.4% | 0.7540 | 0.7788 | 0.4854 | 0.6340 | 0.7514 |
| DADE, MO | 88 | 5.5% | 0.8342 | 0.2072 | 0.1779 | 0.5621 | 0.5713 |
| CEDAR, MO | 34 | 2.1% | 0.7613 | 0.6416 | 0.1181 | 0.6391 | 0.6553 |
| CRAWFORD, KS | 15 | 0.9% | 0.7237 | 0.5124 | 0.4300 | 0.9290 | 0.7683 |

| | Social Vulnerability Indices (SVI) | | | | |
|---|------------------------------------|------------------------------------|----------------------------|-------------------------------|-----------------|
| | Socio-economic | Household Composition & Disability | Minority Status & Language | Housing Type & Transportation | Overall Ranking |
| Estimated SVI for Your Hospital's Catchment Area | 0.8512 | 0.7573 | 0.2531 | 0.4246 | 0.7084 |



Area Deprivation Index (ADI)

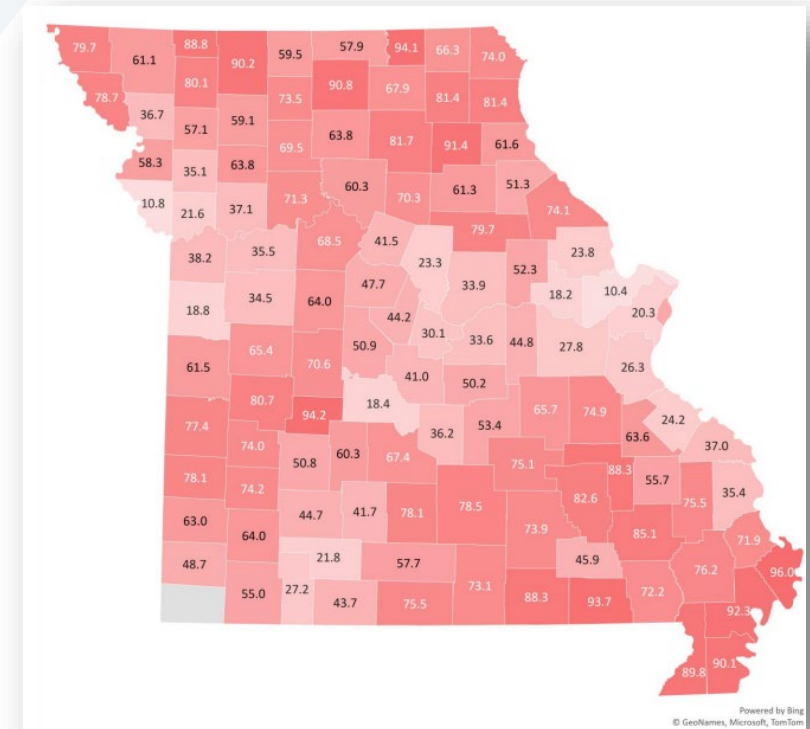
- Measures neighborhood disadvantage by ranking regions by socioeconomic disadvantage
- Incorporates factors such as income, education, employment, and housing quality



Source: [Neighborhood Atlas®](#)

Using ADI Data

| County, State | Your Hospital | | Area Deprivation Index (ADI) |
|---------------|-----------------|-----------------|------------------------------|
| | # Beneficiaries | % Beneficiaries | |
| BARTON, MO | 1067 | 66.6% | 78.1 |
| VERNON, MO | 188 | 11.7% | 77.4 |
| JASPER, MO | 118 | 7.4% | 63.0 |
| DADE, MO | 88 | 5.5% | 74.2 |
| CEDAR, MO | 34 | 2.1% | 74.0 |
| CRAWFORD, KS | 15 | 0.9% | 81.3 |



| | Area Deprivation Index (ADI) |
|---|------------------------------|
| Estimated ADI for Your Hospital's Catchment Area | 76.5 |

Making Data Actionable

HQIN Resource Center

The Social Vulnerability Index Toolkit

Overview

What is the Social Vulnerability Index?

Social vulnerability refers to several external factors that can negatively impact a community's health, such as poor housing conditions, lack of access to transportation and disability. Certain populations need additional support before, during and after a public health event, such as natural disasters and infectious disease outbreaks. The Social Vulnerability Index (SVI) measures the extent to which a community is vulnerable to hazardous events. The index provides a way to plan for challenges related to a community's vulnerabilities and give community members the resources they need.

What is the Data Source for the SVI?

The SVI is based on the American Community Survey (ACS), administered by the U.S. Census Bureau. The ACS obtains information on the changes taking place in various communities' populations, collecting information on social factors (e.g., ancestry, citizenship status), housing (e.g., occupants per room, owner or renter) and economic factors (e.g., class of worker, poverty status and demographics (e.g., race, age). The SVI is updated every two years, based on when the U.S. Census Bureau releases data.

How are SVI Scores Developed?

The SVI considers 15 measures from the ACS and groups them into four distinct themes, as outlined below:

Overall Vulnerability

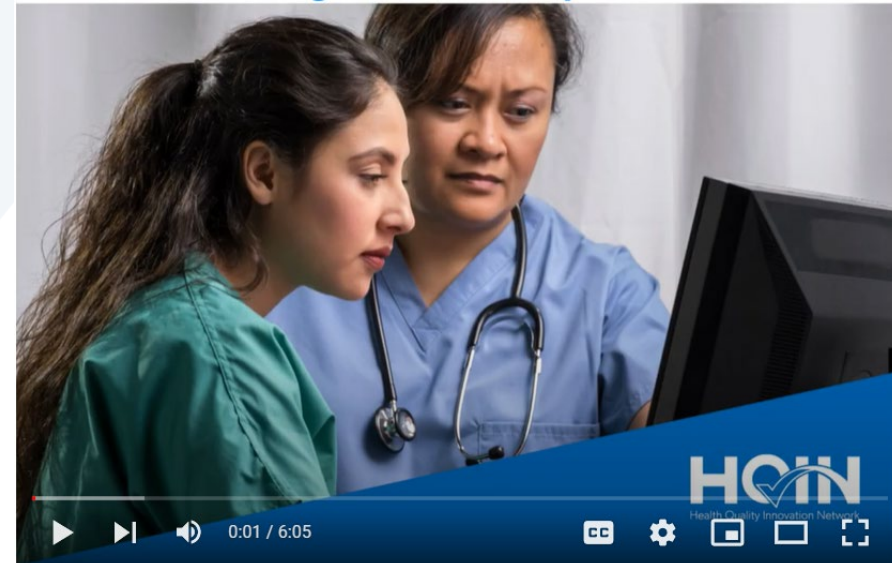
| Socioeconomic Status | Household Composition & Disability | Minority Status & Language | Housing & Transportation |
|--|--|---|---|
| <ul style="list-style-type: none">• Below poverty• Unemployed• Income• No high school diploma | <ul style="list-style-type: none">• Aged 65 or older• Aged 17 or younger• Civilian with a disability• Single-parent household | <ul style="list-style-type: none">• Minority• Speak English "less than well" | <ul style="list-style-type: none">• Multi-unit structures• Mobile homes• Crowding• No vehicle• Group quarters |

The SVI combines and ranks these 15 measures at the census tract level. Census tracts are small, relatively permanent subdivisions of a county or geographic area, typically encompassing a population of about 4,000 people (but can range from 1,200 – 8,000 people). Using



Health Equity Learning Module Series

Using Z Codes to Capture SDOH - Part 4



Part 4 - Using Z codes to Capture Social Determinants of Health



Hospitals In Action

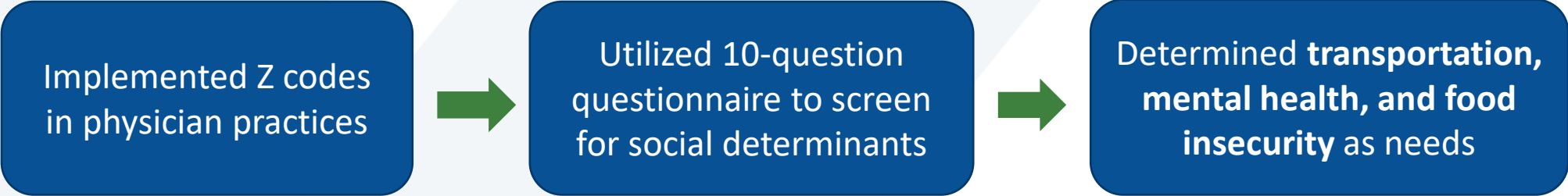
Example: Rural Critical Access Hospital

Hospital Profile

| Location | Western South Carolina |
|-----------------------------------|--------------------------------|
| Hospital Type | Rural Critical Access Hospital |
| Number of Beds | 25 |
| Has an Emergency Department (ED)? | Yes |
| Has an Intensive Care Unit (ICU)? | Yes |

Hospitals In Action

Z Codes



| | Social Vulnerability Indices (SVI) | | | | |
|---|------------------------------------|------------------------------------|----------------------------|-------------------------------|-----------------|
| | Socio-economic | Household Composition & Disability | Minority Status & Language | Housing Type & Transportation | Overall Ranking |
| Estimated SVI for Your Hospital's Catchment Area | 0.7686 | 0.6425 | 0.7202 | 0.8198 | 0.8033 |

Hospitals In Action

Results

- Awarded \$100,000 grant to expand transportation services to the rural community
- Awarded grant to provide free mental health services
- Launched monthly drive-through food box distribution



Hospitals In Action

Example: Urban Targeted, Acute Care

Hospital Profile

| Location | Southeast Missouri |
|-----------------------------------|----------------------------|
| Hospital Type | Urban Targeted, Acute Care |
| Number of Beds | 188 |
| Has an Emergency Department (ED)? | Yes |
| Has an Intensive Care Unit (ICU)? | Yes |

Hospitals In Action

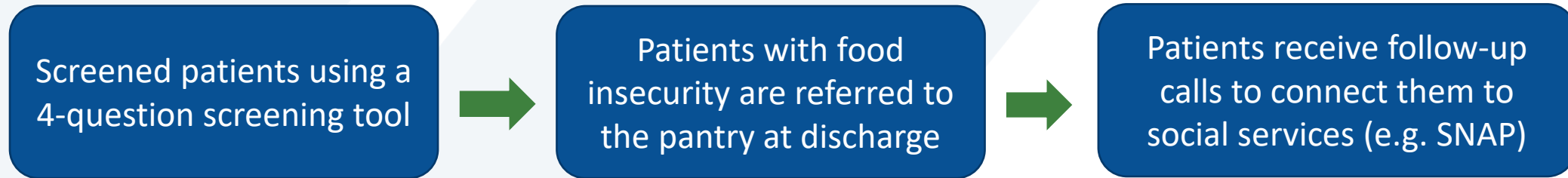
Needs Assessment

- Identified **food insecurity** as a health-related social need through their Community Health Needs Assessment

| | Social Vulnerability Indices (SVI) | | | | |
|---|------------------------------------|------------------------------------|----------------------------|-------------------------------|-----------------|
| | Socio-economic | Household Composition & Disability | Minority Status & Language | Housing Type & Transportation | Overall Ranking |
| Estimated SVI for Your Hospital's Catchment Area | 0.7940 | 0.8157 | 0.5065 | 0.6183 | 0.7815 |

Hospitals In Action

Food Bank Initiative



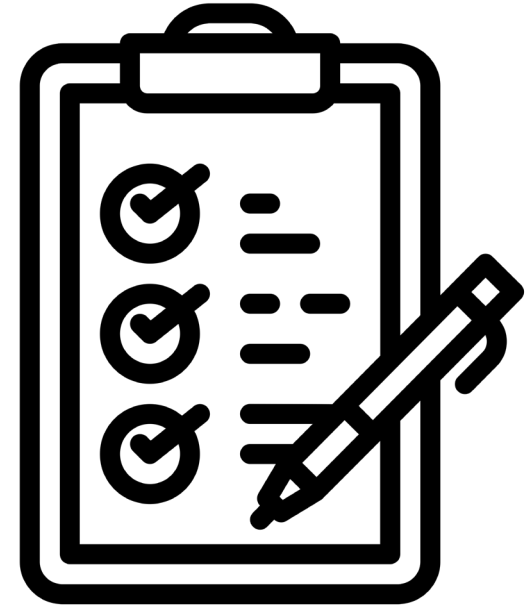
Goal: Reduce the # of patients identified for food insecurity by 10% within the next 3 years

Measures:

- # of patients with food insecurity
- # of patients that accept the referral to the food bank
- Tracking food that has been distributed to acute inpatients upon discharge

Takeaways

- Broadening our understanding of health equity makes it more accessible and achievable
- Supplemental data provides context and depth to disparities
- Start small and scale upwards



Contact Information (1)

Temi Olafunmiloye

Manager, Health Equity

804.287.0298

tolafunmiloye@hqi.solutions



Stay Connected

Connect With Us For Up-To-Date Information



[@hqinnovators](https://twitter.com/hqinnovators)



[@HQINetwork](https://www.facebook.com/HQINetwork)

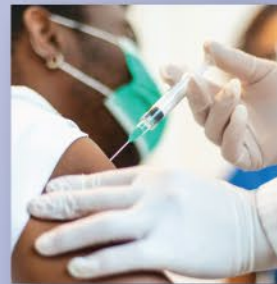


[hqi.solutions](https://www.hqi.solutions)



Making it Work: Practical Solutions to Health Equity for Hospitals (2)

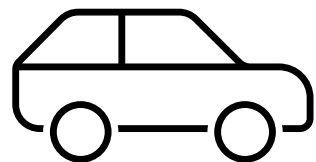
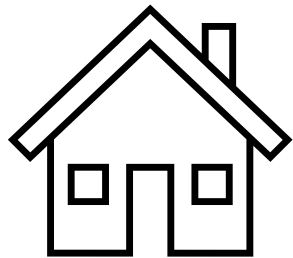
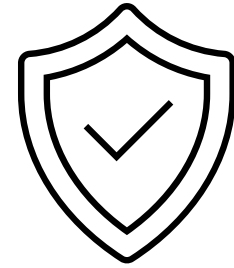
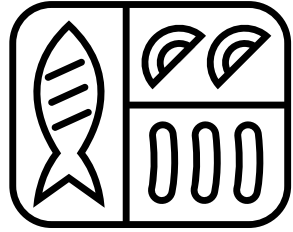
Bruce Spurlock, MD





AGENDA (2)

- Background and challenges
- Hospital readiness
- Your why
- Actions and resources



CMS Final Rule: Screening for 5 Social Drivers of Health / Health Related Social Needs (HRSN)

- Food Insecurity
- Housing Instability
- Transportation Needs
- Utility Difficulties
- Interpersonal Safety

What We've Learned

This is new and complex

Engage community members, patients, and families in every step

Start small

Identify and align with other resources

Screening won't solve all challenges, but it will shine a light on needs

Patients want to know why you're asking

Continually Evaluate and Streamline Screening Systems, Accuracy, and Completeness

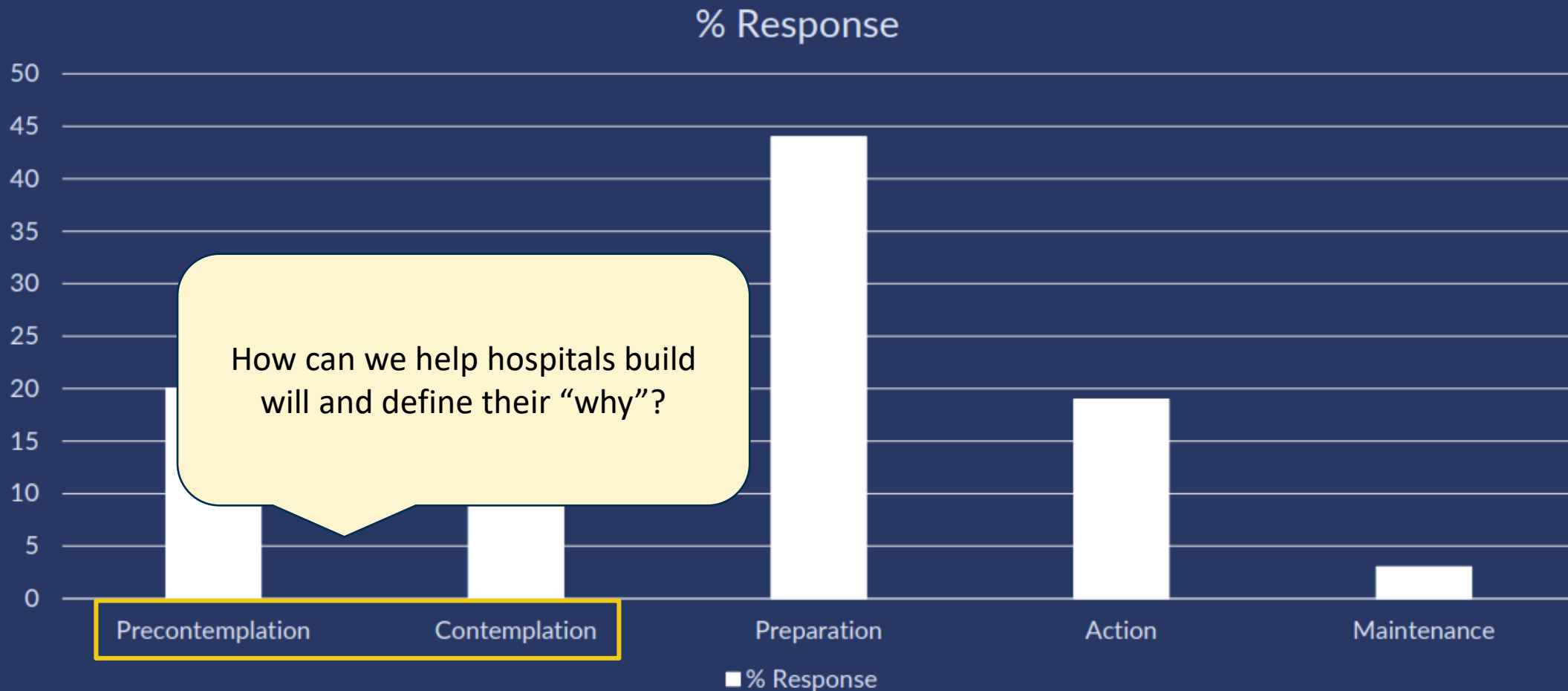
Hospitals face common challenges

- Staff availability and systems to collect, analyze, and use data
 - The right people – local context is important
 - The right training – scripting and sensitivity with patients
 - The right tools – EHR, tablet, paper tool, post-discharge call or all of the above
- Availability of community resources and capacity to support patients who are referred
 - Tracking databases are emerging
- Data collection & documentation... determining a disparity is complex

Source: 10/27/2022 Cynosure Health webinar chat question: What is the greatest challenge you face in setting up SDOH screening?



Most hospitals are in the planning phases



Source: 10/27/2022 Poll Question: Where are you on your journey to implement SDOH screening?



What's Your "Why"?

SDOH Screening Aligns with Multiple Requirements & Priorities

- Community benefit
- Community health needs assessment
- Advancing health equity
- Improving quality (such as readmissions)
- Patient-centered care
- **Something else?**



Getting Started

Actions

- **Set a vision** – what does success look like?
- **Convene stakeholders** – nursing, quality, case managers/social workers, IT, population health, education/marketing, patient family partners
- **Identify existing resources**

Resources

- Existing screening tools- [SIREN](#)
- Your Electronic Medical Record (EMR) capabilities
- Existing partnerships and organizations with whom you have not yet partnered
- Perspectives and ideas from patient family partners who have experienced SDOH screening



Engaging Patient and Family Partners (PFPs) in SDOH Screening Programs

VS

Use data to identify highest community needs

Develop screening program internally

Develop public messaging
Implement program

Evaluate program

Without PFP

Use data to identify highest community need

Validate data with lived experiences

Learn about community resources from the people who are accessing them

PFPs inform community messaging

PFPs co design scripting, inform timing and evaluate screening programs

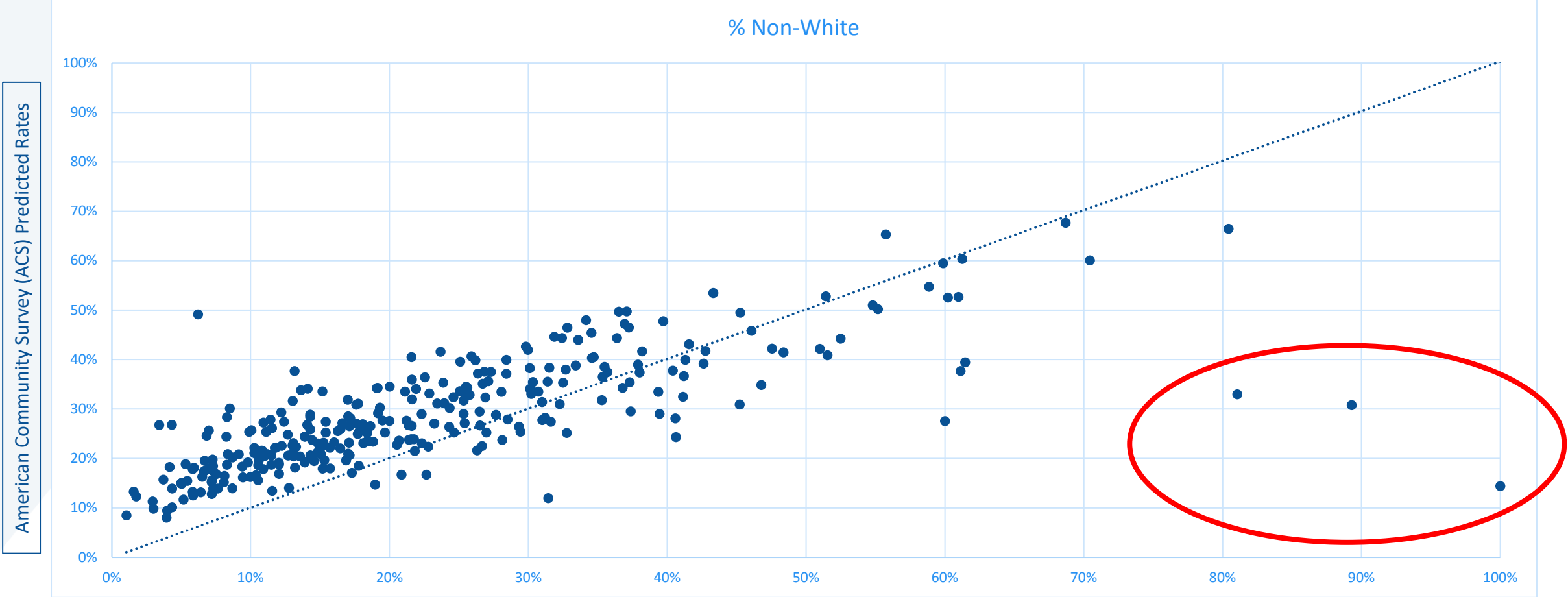
With PFP

Considerations

- Do your staff and providers have a common understanding of why you're screening patients and how you will use the information?
- How will you explain to patients why you are asking questions about SDOH?
- Do the staff who are completing the screenings have the time, training, and resources to do so effectively?
- If a patient screens positive, what will your response be?
- How will you analyze data over time to identify patterns and to proactively address high priority needs in your community?
- How do you know your screening results are accurate?



Data Accuracy: Hospital Service Area vs ACS



What is the role of the hospital?



| | |
|---------|--|
| Anchor | Anchor institution in the community |
| Convene | Convene community partners |
| Begin | Begin at home – hospital staff that have health related social needs |

What's Your Role?

Exhibit 1: Typology of community-level actions for hospitals to address social determinants of health



Source: "Community-Level Actions On The Social Determinants Of Health: A Typology For Hospitals", Health Affairs Forefront, October 11, 2022.DOI: 10.1377/forefront.20221006.388060

Contact Information (2)

Bruce Spurlock, M.D.

President & CEO, Cynosure Health

916-835-0204

bspurlock@cynosurehealth.org



THANK YOU

Temi Olafunmiloye

Manager, Health Equity

Phone: 804-287-0298
tolafunmiloye@hqi.solutions

Bruce Spurlock, M.D.

President & CEO, Cynosure Health

Phone: 916-835-0204
bspurlock@cynosurehealth.org

