An Examination of the Role of Advertising and Promotion in Adult Immunization Disparities

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Discloser and Disclaimer

- Disclaimer: This presentation reflects the views of the presenters and should not be construed to represent FDA's views or policies.
- The presenters have no conflicts of interests or disclosures

Background

- In February 2014, CDC released immunization coverage estimates.
- Vaccination rates for ethnic/racial minorities (Asian, Latino, Black) fell well below Healthy People 2020 targets for adult vaccination.

Background

- There was a disproportionately lower coverage rate among non-Caucasian vaccine recipients for six vaccines routinely recommended for adults including:
  - Herpes zoster (shingles)
  - Pneumococcal
  - Tetanus and Tdap (Tetanus, Diphtheria, Pertussis)
  - Hepatitis A
  - Hepatitis B

Background

- Considerations in Health Communication
  - Advertising and Promotion
  - Health Literacy
  - Cultural Competence
- Advertising and Promotional Labeling – Adult Immunization Health Disparities: Is there a link?

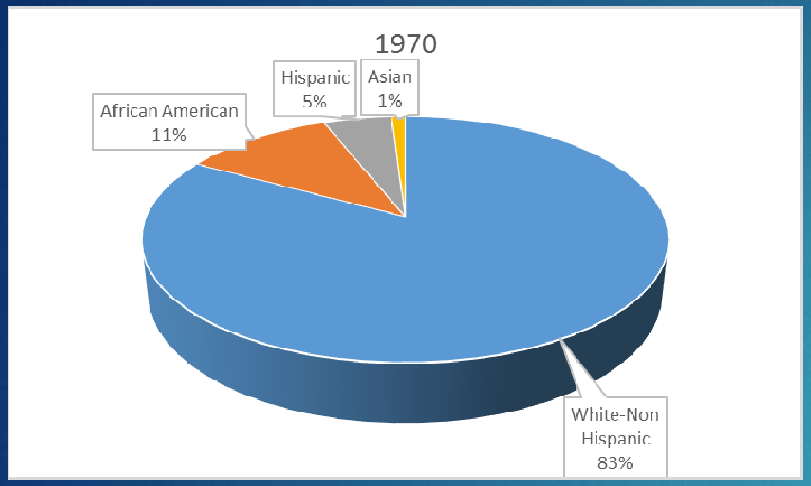
Objectives

- Recognize the changing demographics of the U.S. population
- Describe differences between the original Culturally and Linguistically Appropriate Services (CLAS) standards and the revised CLAS standards
- Explain the stages along the Cultural Proficiency Continuum
- Identify barriers to vaccine-seeking behavior
- Present strategies for vaccine-uptake among minority populations

Research Project Summary

- Gathered information on the advertising and promotion campaigns for products that have the lowest rate of vaccination among elderly racial/ethnic minority populations.
- Aimed to provide information and suggestions for increasing vaccination rates among this population and factors that impact their uptake of vaccines.
- Examined the cultural competence, health literacy, and overall messaging targeted toward this population from a promotional standpoint

That was then



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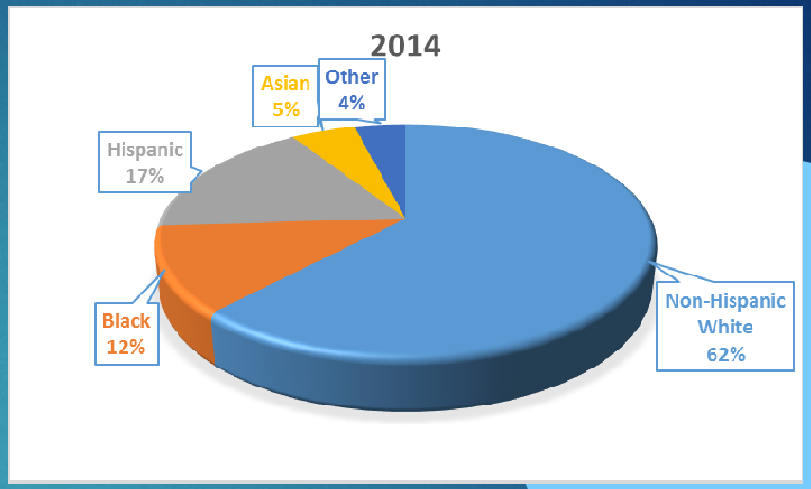

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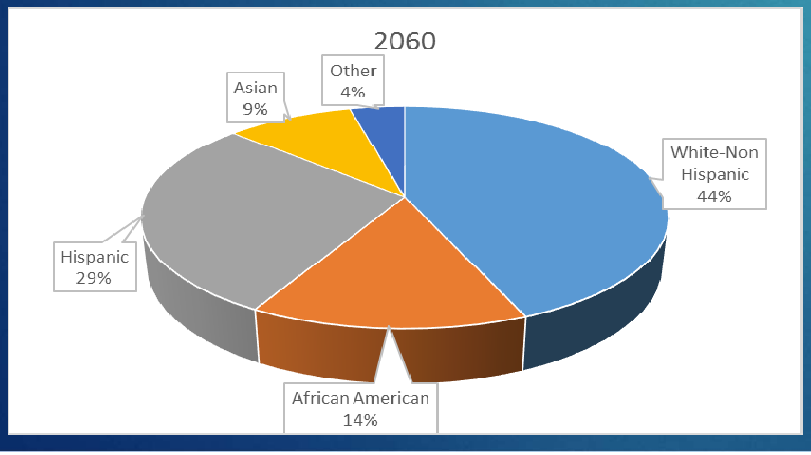


Source: Predictions of the Size and composition of the U.S. Population. Available from: https://www.census.gov/content/dam/Census/library/publications/2015/demo/p25-1143.pdf

Historical census statistics on population totals by race, 1790 to 1990, and by Hispanic origin, 1970 to 1990, for the United States, regions, divisions, and states. Available from: https://www.census.gov/content/dam/Census/library/working-papers/2002/demo/POP-twps0056.pdf

The Changing Landscape of U.S. Demographics

- In 2014, Non-Latino Caucasians made up 62% of the population
- In 2060, Non-Latino Caucasians will make up only 44% of the population
- The population that is Asian is expected to increase by 86% from 2014 to 2060
  - Many different cultures encompassed within this demographic such as Chinese, Japanese, Korean, Phillipino, etc.

Source: Predictions of the Size and composition of the U.S. Population available from: https://www.census.gov/content/dam/Census/library/publications/2015/demo/p25-1143.pdf

What is culture?

- "…the accumulated store of shared values, ideas (attitudes, beliefs, values, and norms), understandings, symbols, material products, and practices of a group of people"[1]

- Non physical traits, such as values, beliefs, attitudes, and customs, that are shared by a group of people and passed from one generation to the next

Source: Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care. Institute of Medicine. In: Smedley BD, Stith AY, Nelson AR, eds. Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care. Washington, DC: The National Academies Press; 2002:522-525.

Source: Spector RE. Cultural diversity in health and illness. New York, NY: Pearson; 2017.

What factors affect culture

- Religion
- Ethnicity (race)
- Origin
  - Language
- Gender
- Age

Source: Spector RE. Cultural diversity in health and illness. New York, NY: Pearson; 2017.

What is cultural competence in health care?

- The understanding of diverse attitudes, beliefs, behaviors, practices and communication patterns that are impacted by a variety of factors including race, ethnicity, historical context, age, and socioeconomic status.

- A culturally competent health provider is able to provide appropriate care to patients with a wide range of cultures

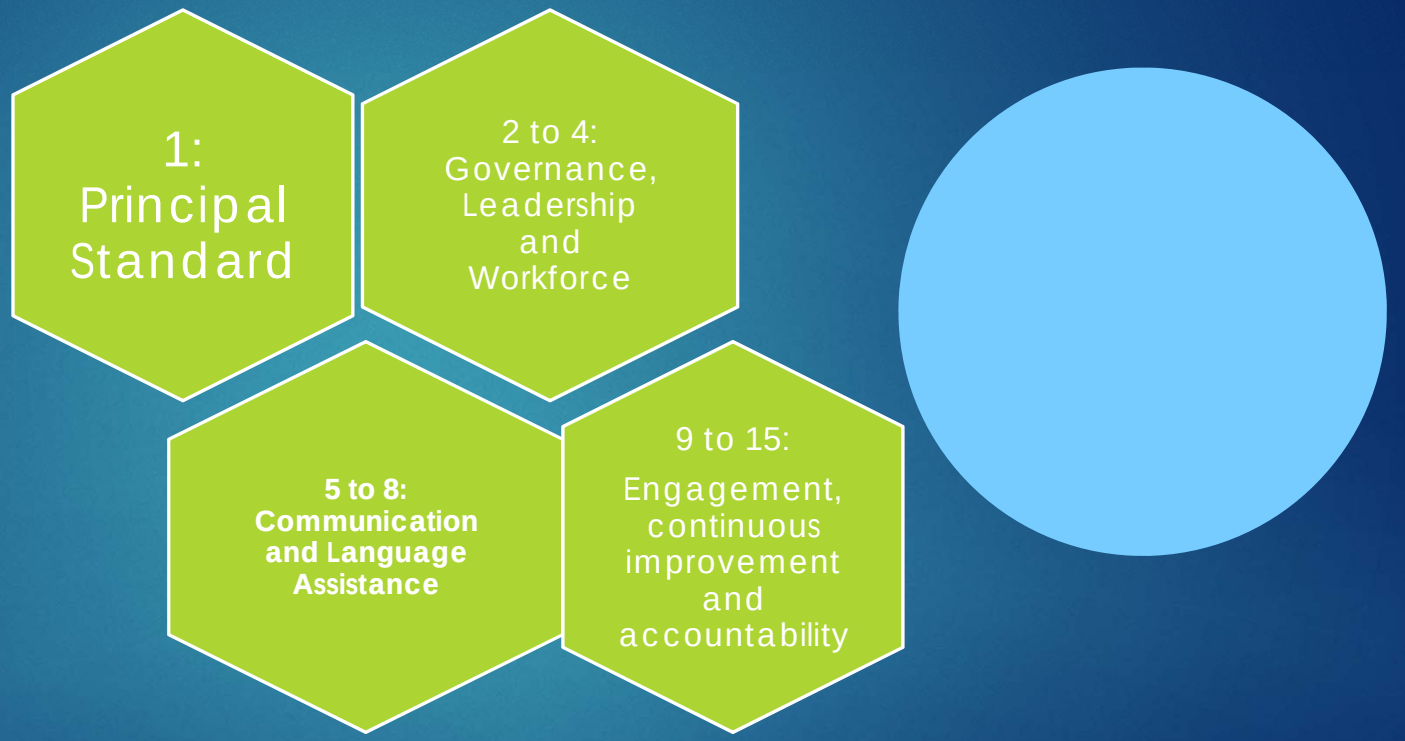
Source: Viste, Jane. "Communicating (birth defects) prevention information to a Hmong population in Wisconsin: a study of cultural relevance." *Substance use & misuse* 42.4 (2007): 753-774.

CLAS Standards: Defined

- CLAS: Culturally and Linguistically Appropriate Services
- Promulgated by the Office of Minority Health in 2000
- Have 15 standards to help guide the provision of culturally appropriate care to patients with a variety of cultures, health literacy levels and languages
- Office of Minority Health CLAS enhancement initiative
  - Launched 2010

Source: National Standards for CLAS in Health and Health Care: A blueprint for advancing and sustaining CLAS policy and practice

CLAS Standards: Components



Source: National Standards for CLAS in Health and Health Care: A blueprint for advancing and sustaining CLAS policy and practice

CLAS Standards: Proposed Goals

2000 CLAS Standards	Updated CLAS Standards
Goal/objective: Decrease health disparities and have healthcare practices to become more culturally and linguistically appropriate	Goal: To promote health equity, improve quality and help eliminate health and health care disparities
Culture defined through racial, ethnic, and linguistic groups	Culture defined through racial, ethnic, linguistic, geographical, spiritual, biological, and sociological characteristics
Target audience: Health care organizations	Target audience: Health and health care organizations
Definition of health is implied	Definition of health includes physical, mental, social and spiritual well being

Source: National Standards for CLAS in Health and Health Care: A blueprint for advancing and sustaining CLAS policy and practice

Challenge Question 1

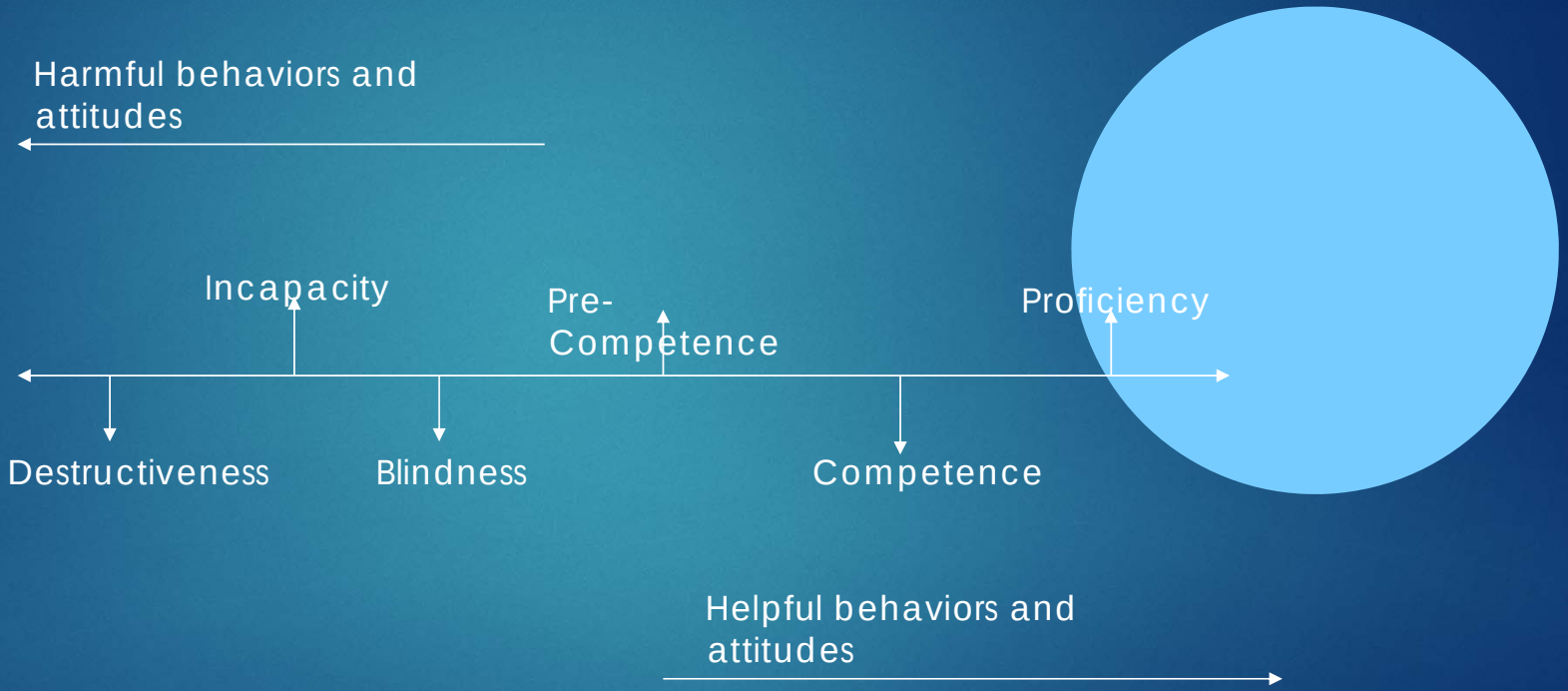
The current goal of Culturally and Linguistically Appropriate Services (CLAS) Standards are:

A. To decrease health disparities and have healthcare practices to become more culturally and linguistically appropriate
B. To imply the definition of cultural health
C. To promote health equity, improve quality and help eliminate health and health care disparities
D. To categorize culture services by the ability to speak a given language

Challenge Question 1 Answer:

C. To promote health equity, improve quality and help eliminate health and health care disparities

Cultural Proficiency Continuum



Engebretson J, Mahoney J, Carlson ED. Cultural competence in the era of evidence-based practice. J Prof Nurs. 2008;24(3):172-8.

Challenge Question 2

The belief that certain cultures are superior and behave in ways to take power away from another culture, makes any culture other than mainstream subordinate

A. Cultural Blindness
B. Cultural Incapacity
C. Cultural Destructiveness
D. Cultural Proficiency

Challenge Question 2 - Answer

B. Cultural Incapacity

- Believes certain cultures are superior and behave in ways to take power away from another culture, makes any culture other than mainstream subordinate
- Examples:
  - Well everyone knows that Caucasians should be receiving vaccines more anyway. Don't they always just have better outcomes?
  - I have been practicing Medicine the same way for 20 years and it has always worked. There is no way I am going to change just because she has different cultural beliefs.

Objectives Systematic Literature Review:

- Conducted a systematic review
  - To explore the extent and contributors to the health disparities
  - To examine culturally sensitive advertising and promotional labeling as potential contributors to disparate vaccination rates

Methods of Systematic Review

- Search Conducted According to PRISMA Guidelines
- Utilized PUBMED database from National Library of Medicine

Methods/Search terms

S1	"Healthcare Disparities"[Mesh] OR "African Americans"[Mesh] OR "Latino Americans"[Mesh] OR "Minority Groups"[Mesh] OR "Ethnic Groups"[Mesh] OR "Minority Health"[Mesh] OR "Continental Population Groups"[Mesh] OR "Health Promotion"[Mesh] OR "Health Knowledge, Attitudes, Practice"[Mesh] OR "Health Surveys"[Mesh] OR "Health Care Surveys"[Mesh]
S2	"Mass Vaccination"[Mesh]) OR "Immunization"[Mesh]) OR "Vaccination"[Mesh]
S3	"Middle Aged"[Mesh] OR "Aged"[Mesh] OR "Adult"[Mesh]
S4	United States
S5	S1 and S2 and S3 and S4

Inclusion/Exclusion criteria

Inclusion:

- English Language
- Vaccination rates for minority populations ≥ 60 years old

Exclusion:

- Lacked data on vaccination rates in minority populations
- Influenza-only

Herpes Zoster Vaccination Rates Among Adults ≥ 60

	2011 %	2012%	2013%	2014%	2015%
Overall	15.8	20.1	24.2	27.9	30.6
Caucasian	17.6	22.8	27.4	32.0	34.6
Black	7.9	8.8	10.7	11.6	13.6
Latino	8.0	8.7	9.5	14.6	16.0

Challenge Question 3

- Which were inclusion criteria for the Adult Immunization Literature Analysis?
  A. Information was presented in a manner conducive to determining vaccination rates among minority populations ≥ 60 years old
  B. Articles were included if they had no data documenting vaccination rates in minority populations
  C. Articles focused solely on influenza and did not have any data regarding 6 adult vaccinations we were looking at. (Tdap, Hep A, Hep B, Pneumococcal, herpes zoster)
  D. Articles presented in languages other than English

Challenge Question 3 - Answer

A. Contained sufficient information to determine vaccination rates for minority populations ≥ 60 years old

Systematic Review: Observations

The causes of the disparities is multifactorial:

- patient's knowledge, beliefs, and attitudes regarding the vaccine.
- frequency with which physician visits
- the presence of health insurance
- educational levels
- cultural competence
- health literacy levels of the advertising and promotional messaging around these vaccines

Focus Group: Recruitment

- Mixture of older persons at a senior center
- Youngest client was 65 years of age
- The oldest client was 92 years of age

Demographic Characteristics of Focus Group Participants

Table 1: Demographic and Clinical Characteristics of Focus Group Participants

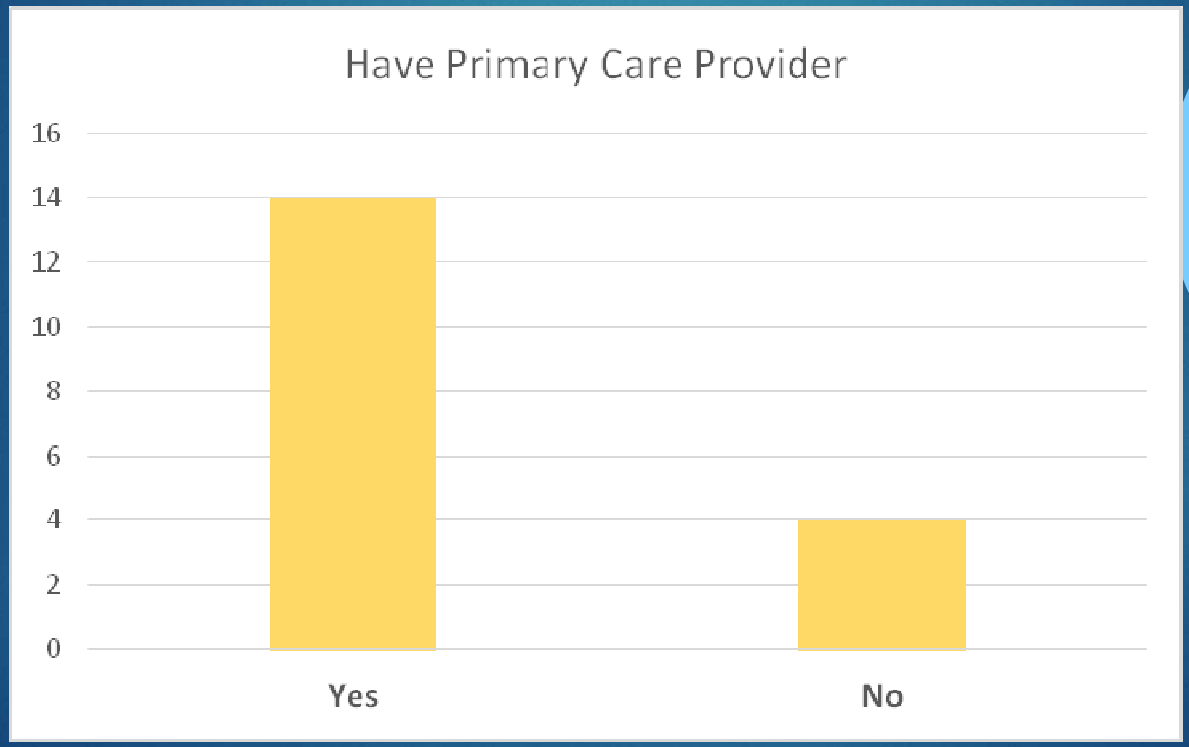
Variable	N (%)
Gender	
Males	6 (33.3%)
Females	12 (66.7%)
Age	
60-70	9 (50.0%)
71-80	7 (38.9%)
81-90	1 (5.6%)
91-100	1 (5.6%)
Marital Status	
Single	5 (27.8%)
Married	2 (11.1%)
Divorced	2 (11.1%)
Widowed	6 (33.3%)
NA	1 (5.6%)
Education	
High School/Less than High School	7 (38.9%)
High School Degree and Vocational Training	3 (16.7%)
Some College or Associate's Degree	5 (27.8%)
Bachelor's Degree or Higher	3 (16.7%)

Health Utilization Related Characteristics

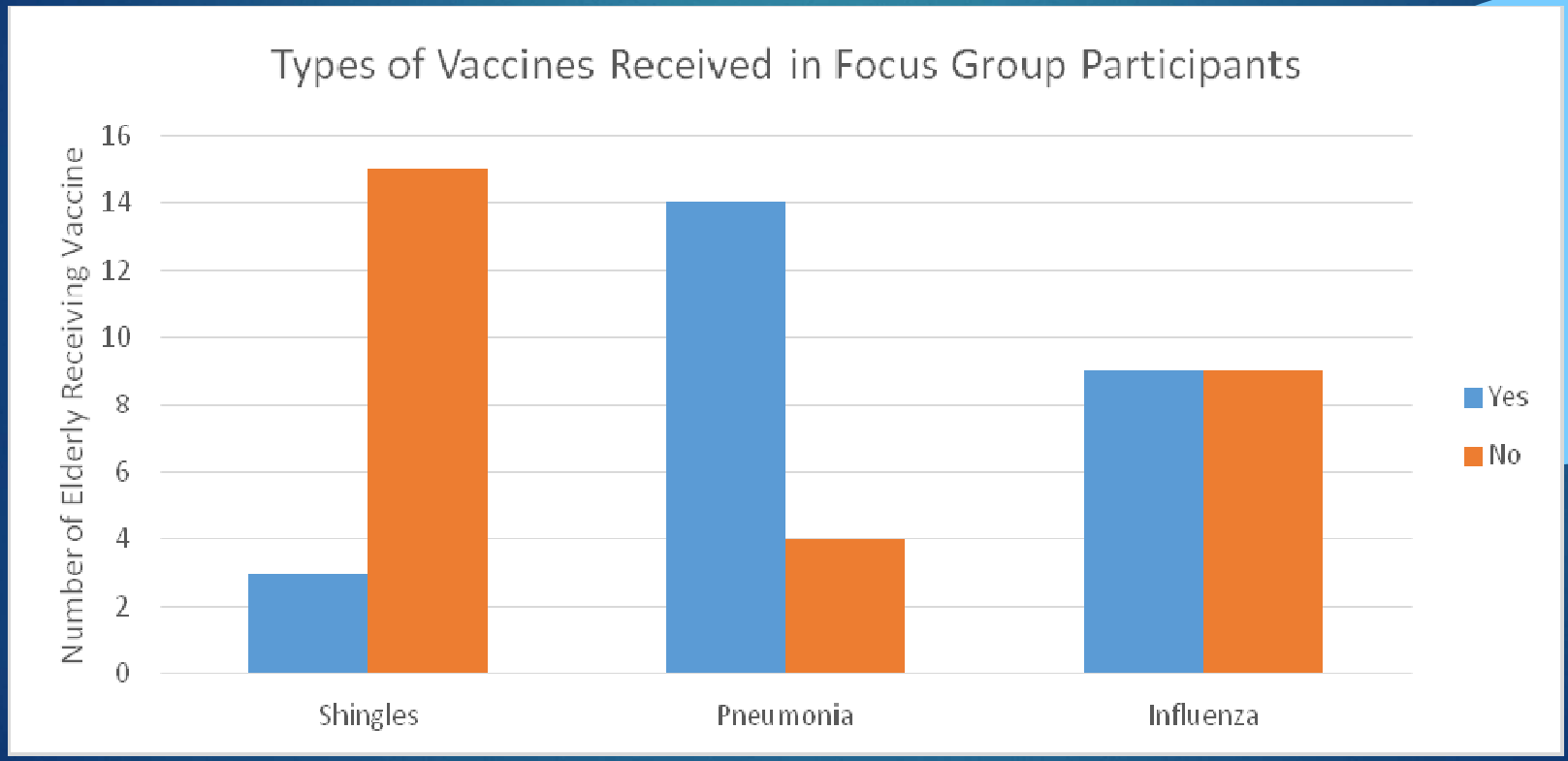
Table 2: Health Utilization Related Characteristics of Focus Group Participants

Variable	N (%)
Type of insurance	
Public only	10 (55.6%)
Private insurance only	2 (11.1%)
Private and public insurance	4 (22.2%)
Not available	2 (11.1%)
Have Primary Care Provider	
Yes	14 (77.8%)
No	4 (22.2%)
Had Chicken Pox as Child	
Yes	8 (44.4%)
No	5 (27.8%)
Don't Know	4 (22.2%)

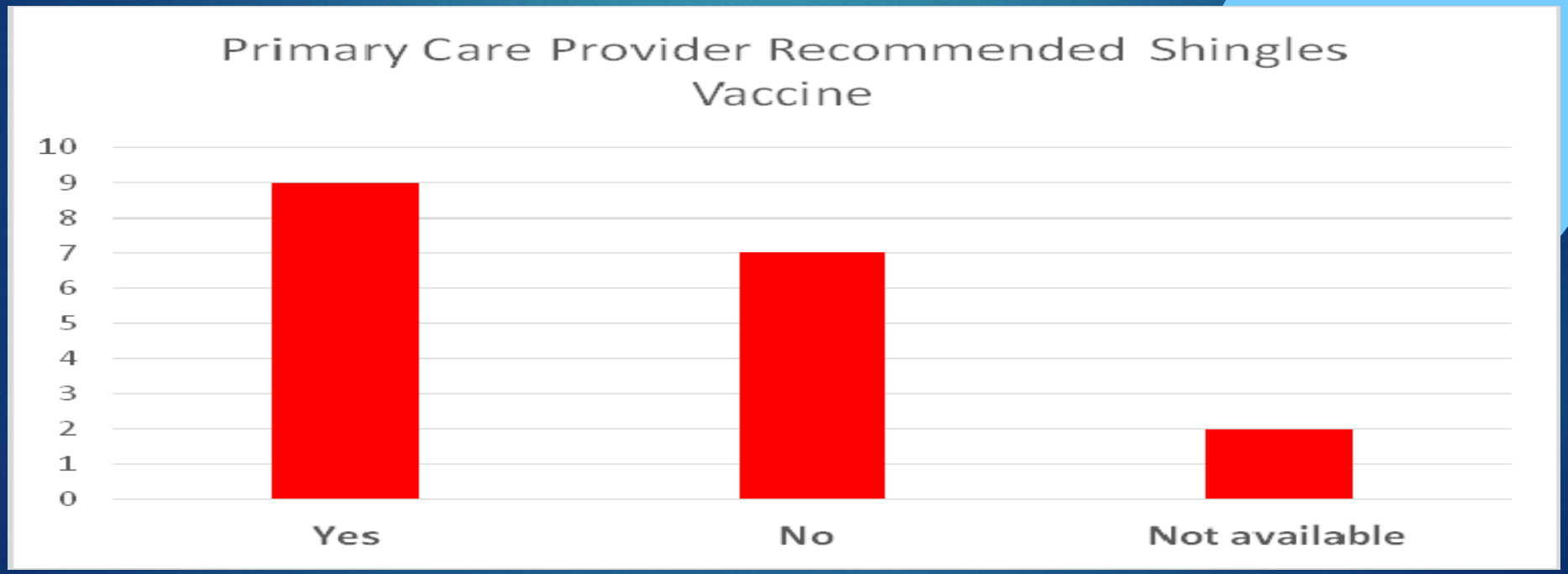
Existence of Primary Care Provider



Types of Vaccines Received



Primary Care Provider Recommended Shingles Vaccine



Vaccines

- Focus Group Participants were familiar with the following vaccines:
  - Influenza
  - Pneumococcal
  - Shingles
- Participants Vaccine Beliefs
  - Not aware of the tetanus or hepatitis vaccines
  - Herpes vaccines not for older people
  - Boosters were for “the young ones”
  - Home remedies would work better for them than vaccines.

Practitioner-Patient Encounters

- Participants stated that during Health Care Encounters:
  - Practitioners had not advised them to be vaccinated
  - They felt that they were “bothering” their practitioner
  - They felt rushed and underinformed by practitioners

Advertisement Impressions

- Focus Group Participants stated that:
  - They do not pay attention to advertisements in magazines or television.
  - They do not trust most advertisements
  - They pay more attention to advertisements in their neighborhood grocery stores

Focus Groups: Reasons for Disparities

- Common reasons for vaccination hesitancy:
  - Lack of knowledge regarding importance of vaccinations
  - Lack of knowledge regarding need for vaccination
  - Lack of access to the vaccine
  - Feelings of mistrust for healthcare professionals
  - Not finding a need for the vaccination/not believing vaccination is necessary
  - Failure of health care professional to recommend/educate clients on vaccinations
  - Venue where advertisement appears i.e. local grocery store versus magazine

Knowledge Gaps

Additional studies needed:

- To assess causes of vaccine seeking and vaccine hesitancy for Tdap vaccine.
- With analysis for potential confounding variables as well as interventional studies are needed to determine means of increasing Tdap vaccination.
- To analyze vaccine seeking behaviors for Hepatitis A and Hepatitis B vaccines.
- Using multivariate models so that the independent role of race in receipt of these vaccines can be delineated.

Recommendations from Focus Groups

- Pneumococcal vaccine, future study to examine the potential impact of vaccine knowledge and awareness interventions on various ethnic populations.
- Shingles vaccine, future study to examine the impact of culturally competent marketing on the immunization rates in racial/ethnic minorities.

Implications and Strategies in Practice:

- There is a need to provide health care providers with the common reasons vaccine hesitancy and avoidance in racial/ethnic elderly minorities:
  - Lack of knowledge regarding vaccine importance and need
  - Lack of access to vaccinations
  - Feelings of mistrust for healthcare professional
  - Failure of health care professional to recommend/educate clients on vaccinations
  - Women feel their health care professional ignore their concerns

Thank You! Questions?