IDENTIFYING BARRIERS AND FACILITATORS TO PROVIDING ADULT IMMUNIZATIONS AMONG MAJORITY-MINORITY SERVING PHYSICIANS

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OUTLINE

I. Disease burden of influenza and pneumococcal diseases
II. Description of adult immunization rates
III. Conceptual model
IV. Three phase plan
DISEASE BURDEN: INFLUENZA

Annual Burden:
- Afflicts 5-20% of the US population
- 200,000 hospitalizations
- Between 3,000 and 49,000 deaths
A HIGHLY EFFECTIVE VACCINE

In the 2015-2016 influenza season, CDC estimated that the annual flu vaccine prevented:

- 5.1 million influenza related illnesses
- 2.5 million medical visits
- 71,000 hospitalizations
SEASONAL FLU VACCINATION COVERAGE BY RACE/ETHNICITY AND SEASON, UNITED STATES, 2010-2016

INFLUENZA VACCINATION COVERAGE (%)

INFLUENZA SEASON


Overall
White, non-Hispanic
Black, non-Hispanic
Hispanic

44.5 41.7 40.0 37.5 35.0 32.5 30.0 27.5 25.0

Overall  White, non-Hispanic  Black, non-Hispanic  Hispanic
DISEASE BURDEN: PNEUMOCOCCAL DISEASES

Pneumococcal Pneumonia
- **400,000** hospitalizations annually
- Accounts for 36% of all community-acquired pneumonia
- **25-30%** of patients also experience pneumococcal bacteremia
- Case fatality rate: **5-7%**

Pneumococcal Bacteremia without Pneumonia
- **12,000** cases annually
- Case fatality rate: **20% (overall), 60% (in elderly individuals)**

Pneumococcal Meningitis
- Pneumococci cause over 50% of cases of meningitis every year
- **3,000-6,000** cases annually
- Case fatality rate: **8% (children), 22% (adults)**
ANNUAL PNEUMOCOCCAL VACCINATION COVERAGE BY RACE/ETHNICITY AND YEAR AMONG THOSE OVER 65, UNITED STATES, 2009-2014

Overall: 61.3, White, non-Hispanic: 64.7, Black, non-Hispanic: 49.8, Hispanic: 45.2
A CONCEPTUAL MODEL

Individual Factors:
- Race/Ethnicity
- Formal Education
- Native Language
- Immunization Literacy
- Socio-economic Status
- Insurance Status

Structural Barriers:
- Access to Care
- Provider Practices

Attitudes and Beliefs:
- Resistant Beliefs
- Non-Resistant Beliefs

Immunization

Disease Related Morbidity and Mortality
ATTITUDES AND BELIEFS: RESISTANT BELIEFS

Beliefs that would prevent someone from accepting immunization, even if the immunization were free

• Belief that the immunization would cause illness
• Fear of immunization related side effects
• Belief that immunizations do not work
• A doctor recommends against the immunization

Highest prevalence in African American individuals

Interventions are difficult

• Involves a significant education of the patient population
ATTITUDES AND BELIEFS: NON-RESISTANT BELIEFS

Beliefs that would not prevent someone from accepting an immunization if it were free
  • Not knowing that immunization is important
  • Doctor did not recommend the immunization
  • Belief that the cost was not worth the money

Easier intervention strategies
  • Efforts to increase provider recommendation (i.e. standing orders)
  • In-office marketing (posters, brochures)
STRUCTURAL BARRIERS: ACCESS TO CARE

Access to care: the ability of individuals to obtain immunization

Barriers:

• Ability to afford the immunization
  • Insurance Status
    • Despite success of the Affordable Care Act, minorities remain disproportionately uninsured
  • Cost
    • If uninsured or underinsured, immunizations can be costly
• Ability to access immunization
  • Access to convenient immunization locations
  • Ability to reach clinics, pharmacies, or primary care locations
STRUCTURAL BARRIERS: PROVIDER PRACTICES

The literature describing the provider’s role in immunization behavior is sparse.

The LSU working group hypothesizes several provider related factors could influence immunization rates:

- Availability of vaccinations
- If vaccinations are provided in house or if prescriptions are written
- Ratio of physicians and support staff to patients
- Other general conditions of the practice
- Current vaccination policy
- Current vaccination interventions
THREE PHASE PLAN

Goal: Identify, assess, and practically test potential patient-, provider-, and organization-level barriers and facilitators to providing adult immunizations among majority-minority serving physicians.

What is a majority-minority physician and why are we interested in them?

Three Phase Plan

Ⅰ. Focus Groups
Ⅱ. Provider Survey
Ⅲ. Intervention Studies
FOCUS GROUPS

Goal: Identify potential patient-, provider-, and organization-level barriers and facilitators to providing adult immunizations among majority-minority serving physicians

• Establish two focus groups: low immunizing providers and high immunizing providers

• Question providers about factors influencing immunization:
  • Organizational policies
  • Personal perceptions and practices
  • Reasons that individuals cite for denying immunization
PROVIDER SURVEY

Goal: Quantitatively assess potential patient-, provider-, and organization-level barriers and facilitators to providing adult immunizations among majority-minority serving physicians

• Develop a survey tool to assess behaviors, beliefs, practices, and policies that focus groups have identified as influencing immunization

• Distribute survey among majority-minority physicians

• Statistically assess the importance of specific behaviors, practices, beliefs, and policies
INTERVENTION STUDIES

Goal: Develop and test interventions to promote behaviors, policies, and practices that statistically positively impact immunization rates

• Identify behaviors, practices, and policies that increase immunization rates from Phase II.

• Design Interventions to see if these factors can be modified and implemented to increase immunization rates in practice
CONCLUSIONS

• Overall national adult immunization rates fall drastically short of Health People 2020 goals despite ability of immunizations to reduce morbidity and mortality
  • Particularly true of minority groups

• The role of the provider in influencing immunization behavior remains poorly understood

• With this three phase plan, we can better understand the role of the provider in immunization behavior

• This understanding will allow us to modify behaviors and maximize immunization rates