



# Data Impact on Disparities: Factors Influencing Adult Influenza Immunization

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## Research Team & Projects

Principle Investigator, Dr. Sandra Crouse Quinn

2009-2010: *Public Attitudes Toward H1N1 Influenza*(CDC)

2011-2017: *Uncovering and Addressing Cultural Beliefs Behind Vaccine Racial Disparities*(NIMHD)

2015- Current: *Supplementing SurveyBased Analyses of Group Vaccination Narratives and Behaviors Using Social Media*(NIGMS)  
(Co-I: David Broniatowski, GWU)



## Overview

1. Why are influenza immunization disparities important?
2. What factors interact to affect vaccine decision making? -
3. How can we use this information to increase vaccine uptake and reduce disparities?



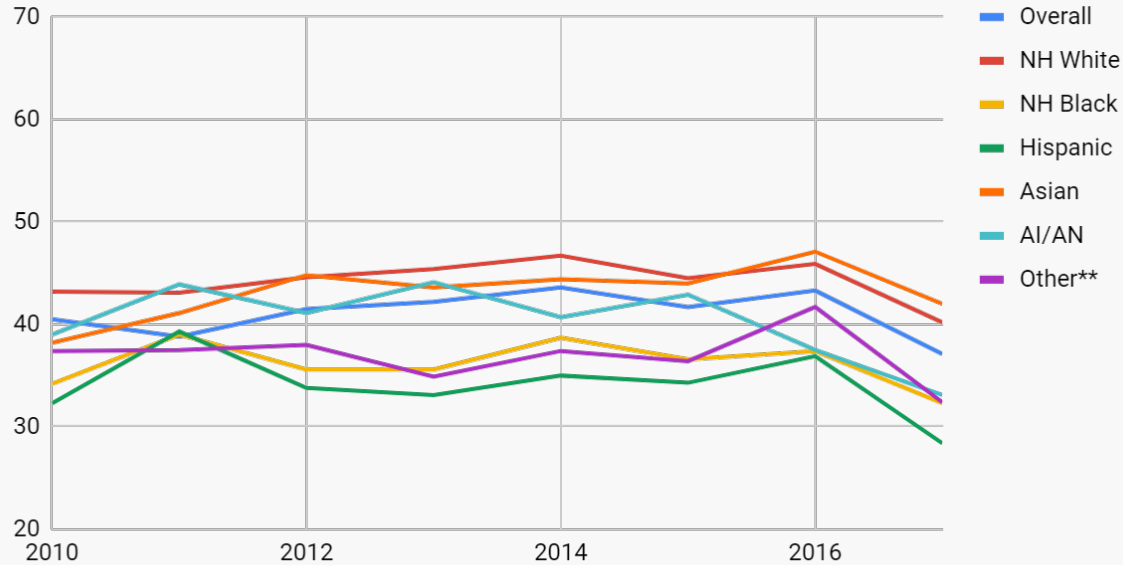
# Why are influenza immunization disparities important?



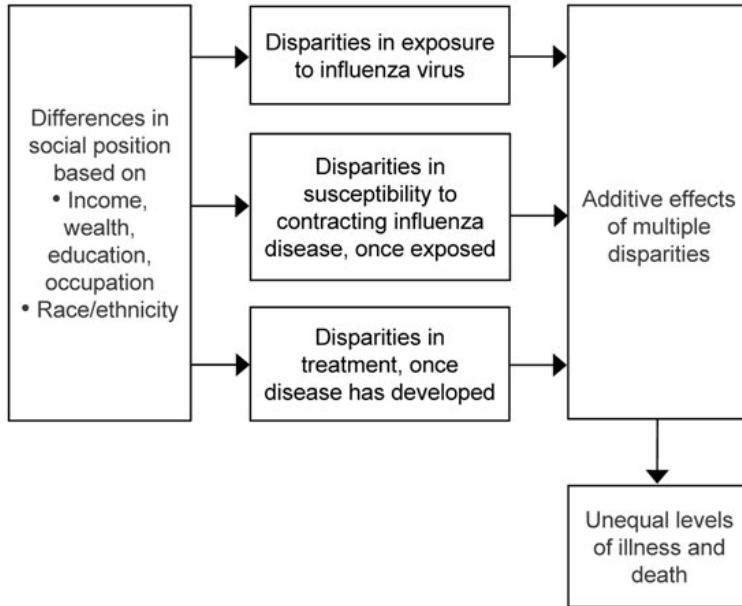
Photo credit: Quinn, 2017



Adult Influenza Immunization Uptake by Race/Ethnicity,  
FluVaxView estimates.



## Understanding the Impact of Disparities



Blumenshine et al. 2008 model for Pandemic Influenza Planning

- Exposure
- Susceptibility
- Treatment

Data from 2009 -10 confirms differences in disease burden by race/ethnicity.



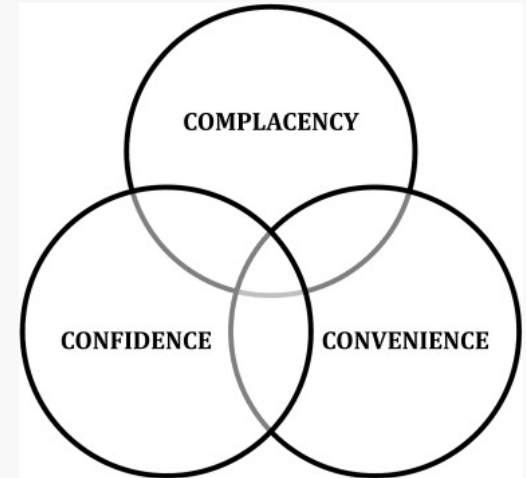
# What factors interact to affect vaccine decision-making?



Photo credit: Quinn, 2017

## Understanding Vaccine Hesitancy

- VH refers to “delay in acceptance or refusal of vaccines despite availability of vaccination services. Vaccine hesitancy is complex and context specific, varying across time, place and vaccines. It is influenced by factors such as *complacency*, *convenience* and *confidence*” (SAGE, 2014).







## Our Work

- Mixed methods investigation of African American and White adults.
  - Qualitative research (  $n=119$  ) including semi-structured interviews, focus groups, and in-depth interviews.
  - National survey (  $n=1,643$  ) administered by GfK online panel.



## Convenience: Access, Cost, and Availability

- Among vaccinated adults, convenience is important, particularly if confidence is high.
- Among non-vaccinators, access related issues are rarely the primary justification for non-vaccination. Secondary to issues of confidence and complacency.
- Can sometimes push a complacent adult into action.



## Complacency: Risk Perception

- Importance of separating perceived risk of disease from perceived risk of vaccine side effects.
- African Americans had higher perceived risk of vaccine side effects and believed side effects were more serious.
- In general, higher perceived risk of disease aligned with increased uptake; however, when perceived risk of vaccine side effects increased, vaccination rates decreased for both groups.

## Confidence: Trust in the Vaccine and Vaccine Process

- Greater trust in the vaccine & vaccine process associated with higher vaccine uptake.
- Low trust in pharmaceuticals, especially based on motives.
- African Americans indicate lower trust in all organizations but rank order is same as Whites





## Considering Social, Cultural, and Racial Factors

- Importance of racial factors in healthcare settings. Perceived racial fairness associated with more trust and higher vaccine uptake. But higher racial consciousness associated with lower trust in vaccine and greater vaccine hesitancy.
- Influence of social norms. General descriptive norms are less influential than proscriptive norms. The importance of people “close to you.”
- Alternatives to vaccination including folk remedies. Vary widely by race and cultural traditions.



**How can we use this  
information to  
increase vaccine  
uptake? And reduce  
disparities?**



Photo credit: Quinn, 2017



## Role Of Public Health Agencies

- Increasing awareness and availability, but also to use public platforms to address underlying concerns
  - ✓ Disease severity and risk of complications
  - ✓ Demystify the vaccine production process
  - ✓ Acknowledging concerns about both disease risk and side effects
  - ✓ Dispelling misinformation

## Role Of Health Care Professionals

- Leveraging trust and trustworthiness
- Increased awareness of racial and cultural factors
- Recommend *and* offer vaccine in same visit.



**I won't spread flu to my patients or my family.**

Even healthy people can get the flu, and it can be serious.

Everyone 6 months and older should get a flu vaccine. This means you.

This season, protect yourself—and those around you—by getting a flu vaccine.

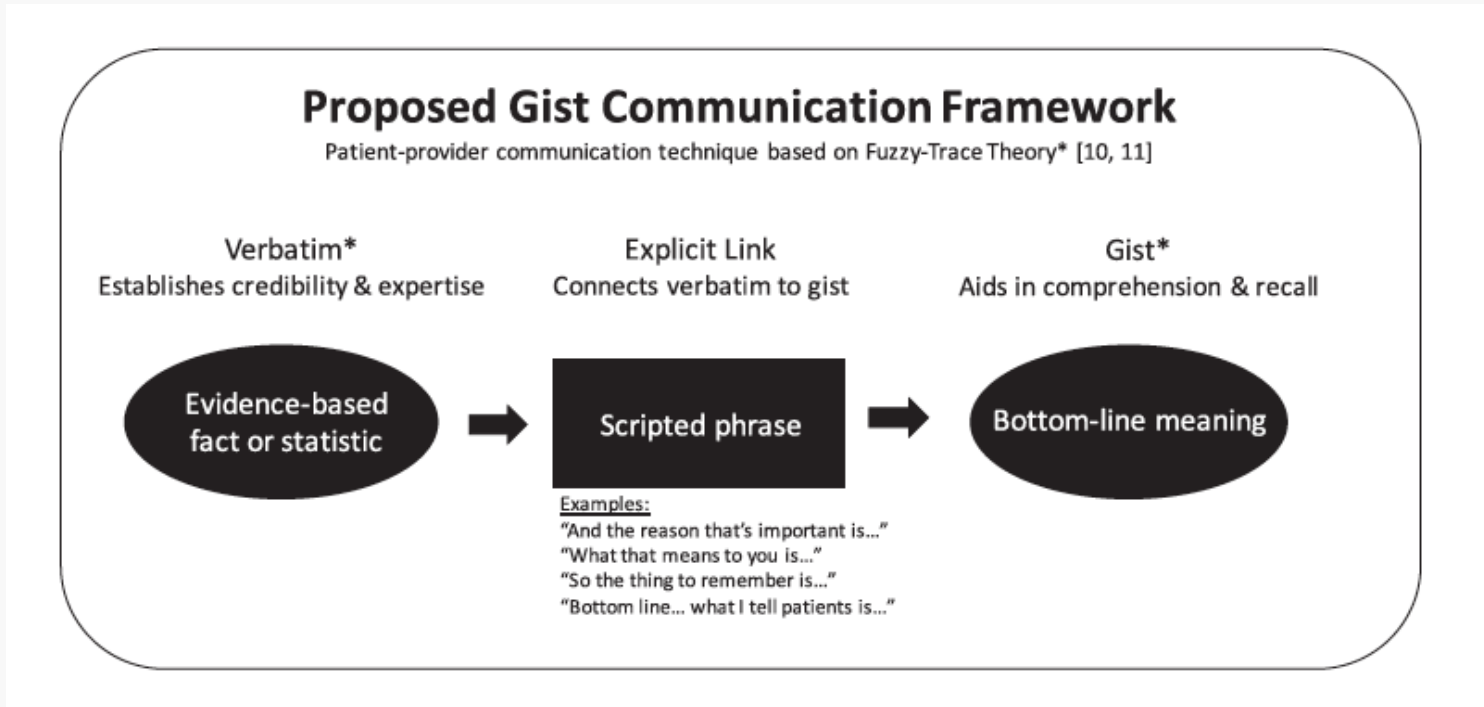
For more information, visit: <http://www.cdc.gov/flu>



U.S. Department of Health and Human Services



# Effective Communication (Broniatowski et al. 2016)





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**Thank you**

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