OVERVIEW OF VACCINE CONFIDENCE

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Session Overview

Objective: To provide the committee with an update on efforts to (1) understand and measure vaccine-related confidence, and (2) to strengthen vaccine-related confidence.

- Focus groups with vaccine-hesitant moms
- CDC's efforts related to vaccine confidence
- Measurement through Canada's Childhood National Immunization Coverage Survey
- Development of a Vaccine Confidence Index
- AAP's response to vaccine hesitancy

Presentation Overview

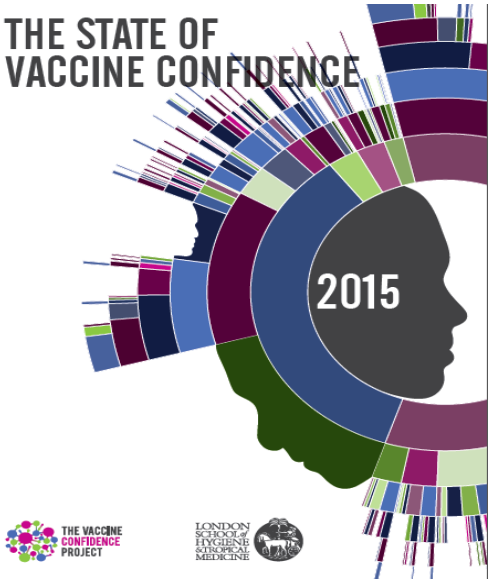
- NVAC and Vaccine Confidence
- Confidence Overview
- NVPO’s Approach

NVAC's Guidance

- *Assessing the State of Vaccine Confidence in the United States: Recommendations from the National Vaccine Advisory Committee (2015)*
- Focus areas of NVAC recommendations:
  - Measurement and tracking
  - Communication and community strategies
  - Healthcare provider strategies
  - Policy strategies
  - Continued support and monitoring
- Opportunity area 2 of NVP MCR– "*strengthen confidence in vaccines and the immunization system to increase coverage rates across the lifespan*" (2016/2017)

World Health Organization

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN™



NVAC NATIONAL VACCINE ADVISORY COMMITTEE

AMA AMERICAN MEDICAL ASSOCIATION

NACCHO
National Association of County & City Health Officials

Mark Zuckerberg

Vaccine

The New York Times

Terms

- Vaccine confidence: refers to the trust that parents, patients, or healthcare providers have in:
  a) the recommended vaccines
  b) those who administer recommended vaccines
  c) the processes and policies involved in vaccine development, licensure, manufacturing, and recommendations for use
- Other definitions exist:
  - "little worry or concern"
  - "strong belief this is best action"
  - "strong belief in safety, value, and effectiveness"

Terms (cont.)

- Vaccine confidence is believed to be related to both vaccine hesitancy and vaccine acceptance
  - Vaccine hesitancy: refers to delay or refusal of vaccines despite availability of vaccine services, and is complex and context specific, varying across time, place and vaccine.
  - Vaccine acceptance: characterized in terms of vaccine uptake/coverage or adherence to recommended schedule and measured by past behavior and/or intentions or willingness to comply in the future.

Confidence, Hesitancy, Acceptance

- Those with higher levels of confidence are believed to have lower levels of hesitancy and greater levels of acceptance

- Vaccine-related confidence is one of many factors related to hesitancy and acceptance

Taxonomy for Vaccine Uptake

"…vaccination coverage may be determined by a complex mix of demographic, structural, social, and behavioral factors."

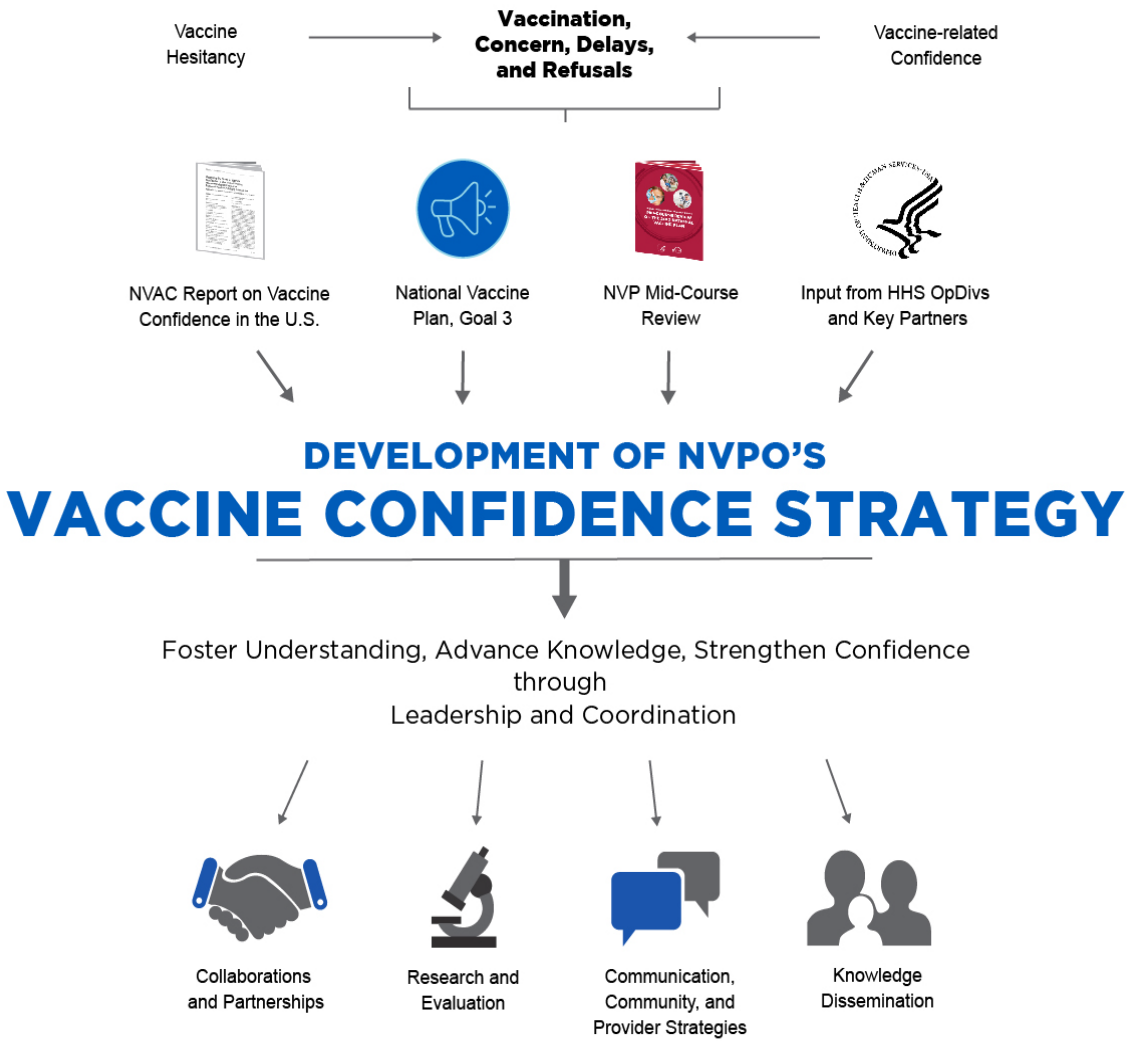
Table 1
Working definitions and contributing factors of the 5As.

Root cause	Definition
Access	The ability of individuals to be reached by, or to reach, recommended vaccines
Affordability	The ability of individuals to afford vaccination, both in terms of financial and non-financial costs (e.g., time)
Awareness	The degree to which individuals have knowledge of the need for, and availability of, recommended vaccines and their objective benefits and risks
Acceptance	The degree to which individuals accept, question or refuse vaccination
Activation	The degree to which individuals are nudged towards vaccination uptake

(Thomson, Robinson, and Vallée Tourangeau, 2016)

Rationale

- Overall, childhood vaccination rates in U.S. are at, near, or above historical highs (e.g., 2015 National Immunization Survey), however:
  - Communities exist where vaccination rates are lower than desired for adequate protection
  - Some parents are delaying or declining some or many vaccines, including because of worry or concern
  - Pockets of under- or non-immunization have the potential to foster transmission of VPDs
- Important to foster confidence in vaccines, those who administer vaccines, and the recommended schedule


Vaccine Hesitancy
Vaccination, Concern, Delays, and Refusals
Vaccine-related Confidence
NVAC Report on Vaccine Confidence in the U.S.
National Vaccine Plan, Goal 3
NVP Mid-Course Review
Input from HHS OpDivs and Key Partners
DEVELOPMENT OF NVPO'S
VACCINE CONFIDENCE STRATEGY
Foster Understanding, Advance Knowledge, Strengthen Confidence through
Leadership and Coordination
Collaborations and Partnerships
Research and Evaluation
Communication, Community, and Provider Strategies
Knowledge Dissemination

NVPO's Roles

- **Foster collaborations and partnerships** that further understanding, and help strengthen, public, parent, and provider vaccine-related confidence;
- **Provide leadership** that advances efforts and activities in this domain;
- **Help strengthen** vaccine and vaccination confidence-related **communication and education efforts, materials, and messages**;
- **Facilitate identification and visibility of research** efforts and findings, interventions that could have or show promise, and evidence-informed resources

FOCUS GROUP INSIGHTS

DISCUSSIONS WITH MOTHERS WHO ARE HESITANT ABOUT CHILDHOOD VACCINATIONS

Objectives

- Explore vaccine hesitancy among mothers and female guardians of young children
- Obtain a better understanding of what drives vaccine-related confidence
- Gain insights on approaches to build trust and overcome hesitancy around immunization
- Assess potential value of different messaging approaches for educating parents

METHODS

Methods

- 8 moderator-lead groups
  - 4 Philadelphia area
  - 4 San Fran. area
- 6-9 per group (n=61)
- April & May 2016
- 2 hours each

- Semi-structured discussion
  - Health concerns
  - Defining confidence
  - KABs on vaccines and immunization
  - Feedback on videos & infographics

Recruitment

- Participants recruited by phone and email
- Criteria:
  - Female 18+
  - Health decisions of at least 1 child <5
  - Demonstrated vaccine hesitancy
- Different races and ethnicities
- Groups split by SES ($75K anchor)

THEMES FROM DISCUSSIONS

Defining Confidence

- Many participants equated confidence to trust, knowledge, and power
- Having confidence meant:
  - trusting, feeling good about a decision, many years of research/practice, being informed, knowledgeable
- Lacking confidence meant:
  - not trusting, questioning, feeling ill-informed, skeptical, lacking knowledge, product not work the way it's supposed to, something causing harm

Participant Concerns- Ingredients & Physiology

- Incorrectly believed in a **link** between vaccines and autism
- Stated that vaccines are made from "**weakened pathogens**"
- Believed that vaccines are a **replacement for a function** the body is equipped to handle
- Fears of **side effects** (near and long term)
- Little tolerance for **minor reactions**

Participant Concerns- Ingredients & Physiology

"One of my concerns is the side effects, because there's all these side effects for all these things. You don't really ever know fully what the side effects are going to be until they grow up."

– Philadelphia

Participant Concerns- The Schedule

- More accepting of the vaccines that were on the **schedule when they were children** (polio)
- Do not understand why vaccination **starts so young**
- Prefer **alternative and catch-up schedules**
- Felt there were **too many shots**
- Others preferred to **not use combination vaccines**

Participant Concerns- The Schedule

"*Everyone's body chemistry in this room is different. So each child is different. Putting the same thing in every child doesn't really make sense to me*."

– Philadelphia

Participant Concerns- Medical System

- **Dynamic with doctors** is different from when they were children
- Do not like **feeling pressured** by healthcare provider to vaccinate child
- Want **more time to make decisions** prior to point-of-care
- If receiving subsidized/free health services the **products received are subpar**
- General **lack of trust** for mainstream medicine and those involved in immunization system

Participant Concerns- Medical System

"Then it's like maybe in the 80s or 90s when your family had a doctor and everybody in your family went to the same doctor. It's way different now…."

– Oakland

"Don't give me something from the government because I know government and pharmaceutical companies are in cahoots together."

– Philadelphia

MESSAGING APPROACHES

Messaging Discussions

Purpose:

- Understand how participants reacted to immunization-related messages
- Identify if engagement influenced attitudes about vaccination

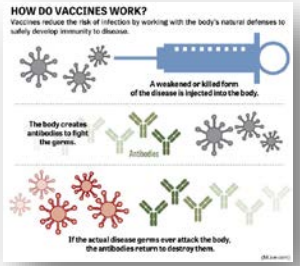
Concepts (video & printed infographic):

- How vaccines work
- Herd/community immunity
- Vaccine safety (anchoring risk)

Testing:

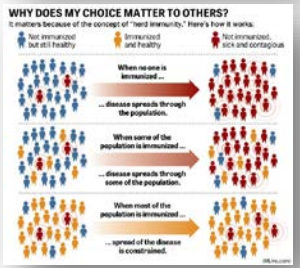
- Worksheet with questions around the key messages
- Asked if materials increased their confidence

Materials Snapshot



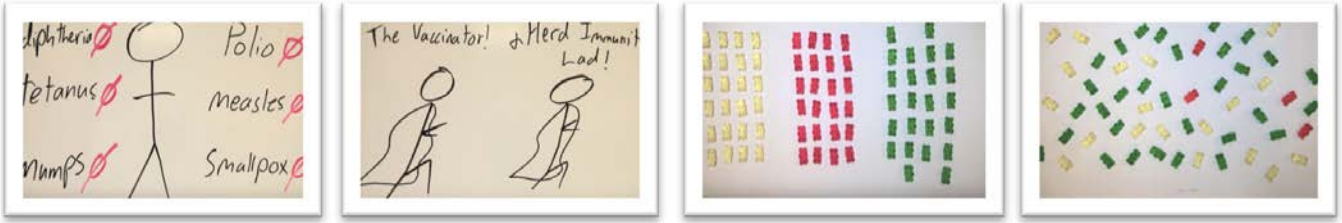
(1) How Vaccines Work

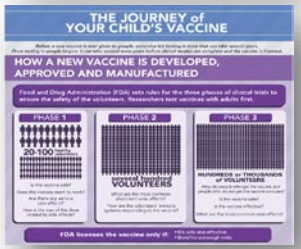
https://www.youtube.com/watch?v=lXMc15dA-vw



(2) Herd Immunity

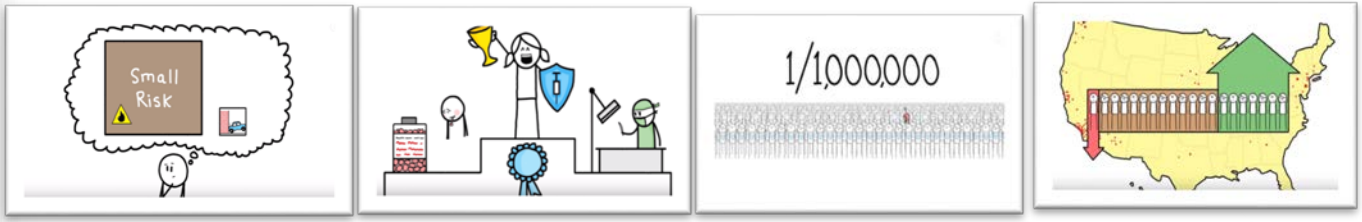
https://www.youtube.com/watch?v=CPcC4oGB_o8





(3) Vaccine Safety

https://www.youtube.com/watch?v=NaGndICPT8I



Reactions to Materials

Example: Overall, how appealing is the video/poster?
(1= very unappealing and 5= very appealing)

Table 2– Concept Testing Composite Ratings; n=61

	Video Appeal	Poster Appeal	Informative	Helpful	Gets my attention	Increases Confidence
Overall Average	3.7	3.1	4.0	3.7	3.7	3.3
$75K+ Income (total average)	3.4	2.9	3.8	3.4	3.4	3.2
<$75K Income (total average)	3.9	3.2	4.2	4.0	3.9	3.3
Philadelphia Metro	3.8	3.1	4.2	3.9	3.8	3.4
San Francisco Metro	3.6	3.0	3.8	3.5	3.5	3.1

*** Rating on a 1 to 5 point scale (1 = lowest and 5 = highest)**

Elements for Effectively Communicating

- Clear messages
- Respectful tone
- Use of statistics & details
- Information on both pros and cons
- Credible source
- References to additional information

Conclusions

For these women:

- Confidence entailed trust, knowledge, and control
- Vaccine ingredients, the schedule, and mainstream medical system fostered concerns
- Perceptions of vaccines and immunization were deeply held and often emotional

Conclusions (cont.)

For vaccine communicators:

- Many sources shape views and beliefs
- No single message or approach worked well with all
- "Balanced" messages were desired
- Short videos may have promise and potential

References

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THANK YOU!