

Identifying, Understanding, and Talking with Vaccine-Hesitant Parents

Fondation Mérieux

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Disclosure

- I have no financial relationships or affiliations to disclose.



Typical Vaccine Discussion in U.S.

Provider: So, we missed his 1 year old vaccines. Do you want to do those today?

Parent: I'm really on the fence right now with vaccinations. I have a lot of friends, mothers, who get things all the time about vaccinations, how they don't vaccinate, and I don't know. I really haven't researched it enough on my own to feel confident in saying I'm not going to do it, but I don't know, I'm mixed about it.

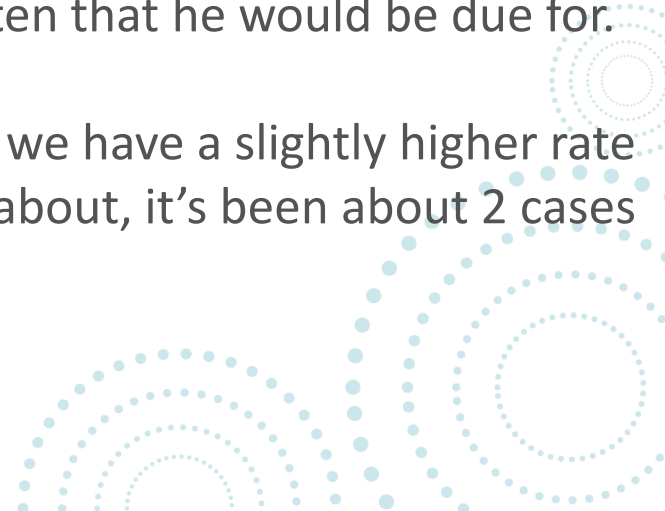
Provider: Um, I certainly don't want you to do the vaccines if you want to read more about them and we can give you information if, are there questions I can answer for you about them? I can certainly give you my opinion.

Parent: So what is he due for?

Provider: The MMR, chicken pox, and hepatitis A. He's almost 15 months though so there's boosters also of vaccines that he's already gotten that he would be due for.

Parent: Mm hmm.

Provider: So I will just tell you from my experience. So we have a slightly higher rate of vaccine refusal in our state. I've already diagnosed about, it's been about 2 cases of whooping cough in the last 3 weeks.



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Parent: Mm hmm.

Provider: So, he is partially vaccinated, he's had three rounds of the whooping cough vaccine. He, um, he's at a little higher risk for having, you know, complications of that just 'cause he's got smaller airways and smaller lungs. So that would be certainly one I would consider doing seeing that he's had that before.

Parent: Mm hmm.

Provider: He could also get Hib.

Parent: What's that for?

Provider: So that's the one that he's also had three doses of before. It is for a bacteria that causes, um, pretty serious infections in children, like blood infections, meningitis. I actually don't see a lot of these compared to whooping cough.

Parent: Mm hmm.

Provider: I, I can totally respect wanting to space out, um...

Parent: So, but um, (sighs), why don't we do the whooping cough. I feel okay about that one. The other ones, I don't know. Are those something we really need to do?

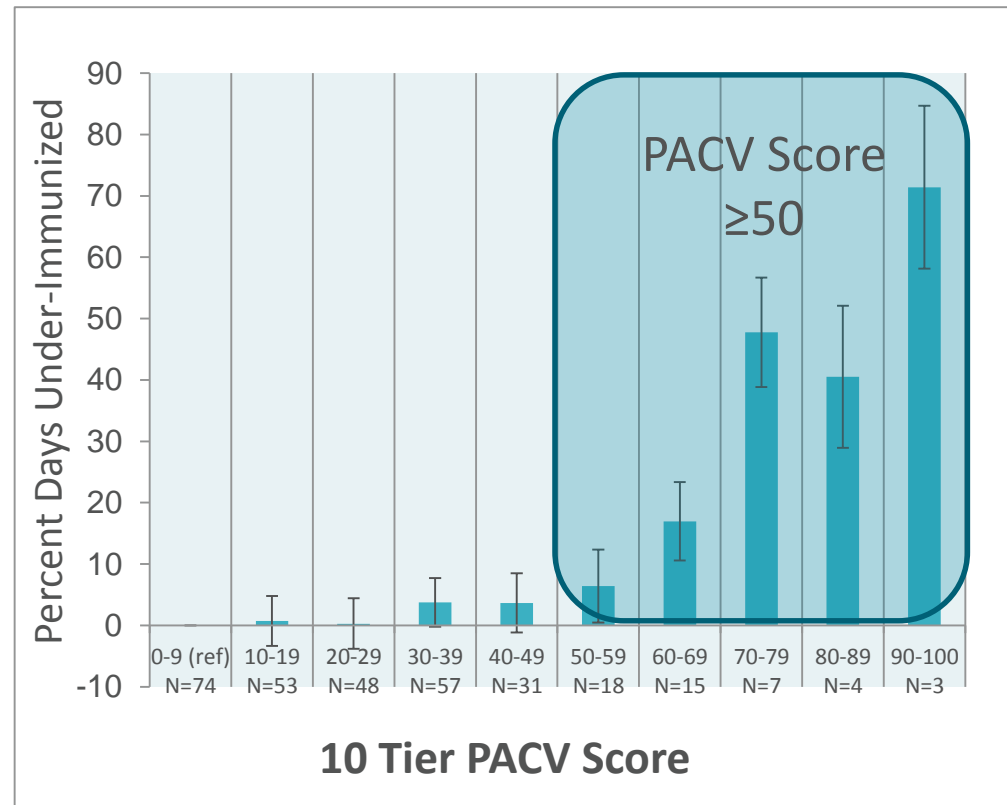
Outline

- Identifying and Understanding Vaccine-hesitant Parents
 - Validation and refinement of the Parent Attitudes about Childhood Vaccines (PACV) Survey
- Talking with Vaccine-Hesitant Parents
 - Early evidence for effective communication strategies



The Parent Attitudes about Childhood Vaccines (PACV) Survey

- 15 items under 3 domains
 - Behavior (2 items)
 - Example: “Have you ever delayed having your child get a shot for reasons other than illness or allergy?”
 - Safety and Efficacy (4 items)
 - Example: “How concerned are you that your child might have a serious side effect from a shot?”
 - General Attitudes (9 items)
 - Example: “It is better for my child to develop immunity by getting sick than to get a shot.”



Refining the PACV: 2 goals

Reduce the
number of items

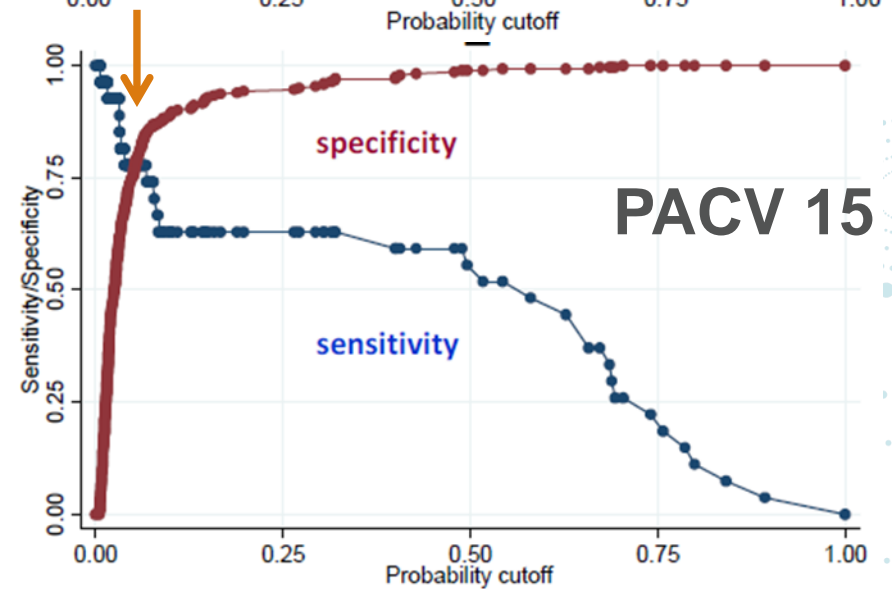
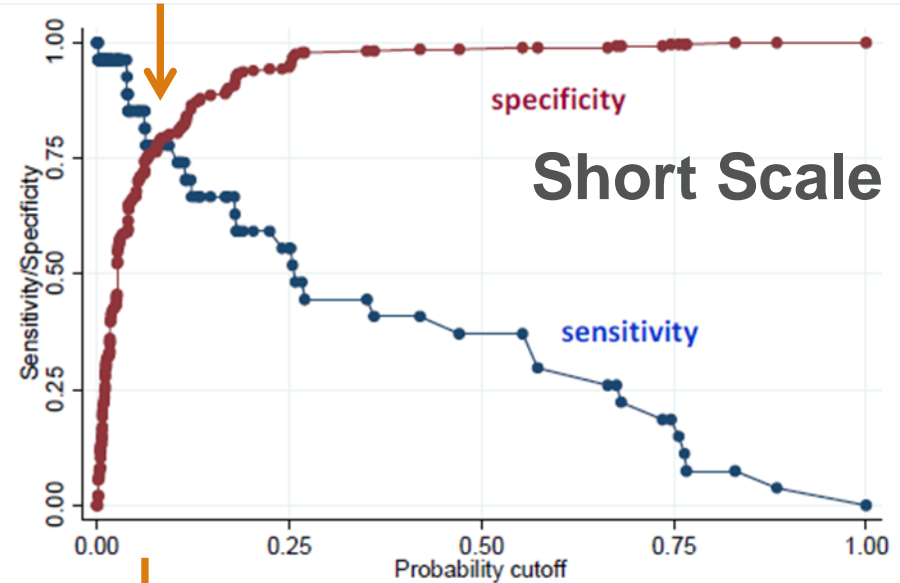
minimize parental burden and increase potential for adoption as screening tool in clinical setting

Enhance
measurement
precision and
predictive power

- using un-collapsed responses and multiple-factor analysis to assess scale reliability and factor structure can increase precision
- use of alternative regression models to associate PACV scores with child immunization status may increase predictive power
- use of item response theory modeling can increase ability to discriminate parents who have high enough hesitancy to yield hesitant behavior

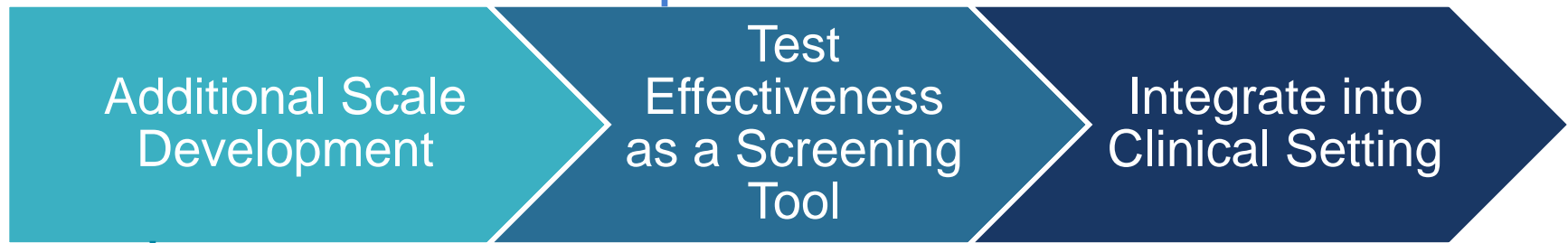
PACV Short Scale: 5 items

- I trust the information I receive about shots.
- It is better for my child to develop immunity by getting sick than to get a shot.
- It is better for children to get fewer shots at the same time.
- Children get more shots than are good for them.
- Overall, how hesitant about childhood shots would you consider yourself to be?



Steps Needed to Advance Clinical Use of the PACV

- Determine feasibility of screening parents with the PACV before health supervision visits and its impact on a child's immunization status



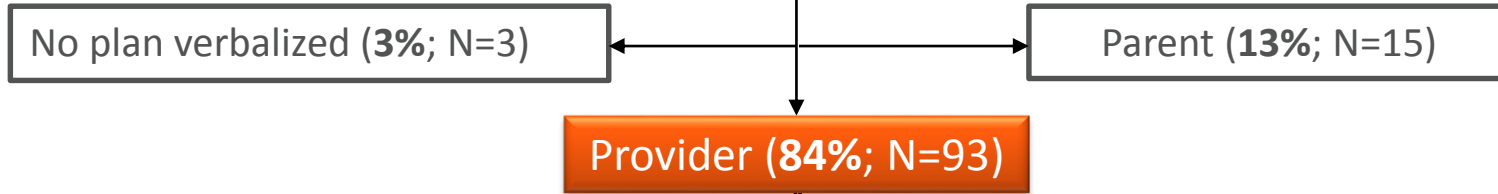
- Validate short scale results in independent dataset
- Repeat predictive studies in different geographic populations in US and elsewhere (e.g. S. Elizabeth Williams et al, Vanderbilt) & different age populations (adolescents: e.g. J. Roberts et al, South Carolina; pregnant mothers: J. Glanz and J. Shoup, Colorado)
- Investigate the relationship between the PACV and specific vaccinations

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- Identifying and Understanding Vaccine-hesitant Parents
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- **Talking with Vaccine-Hesitant Parents**
 - **Early evidence for effective communication strategies**



Who initiated the vaccine discussion/plan specifically? (N=111)



How does the PROVIDER initiate the vaccine discussion/plan? (N=93)

"It's time to start all those vaccines... we're going to be doing the MMR and the chicken pox."



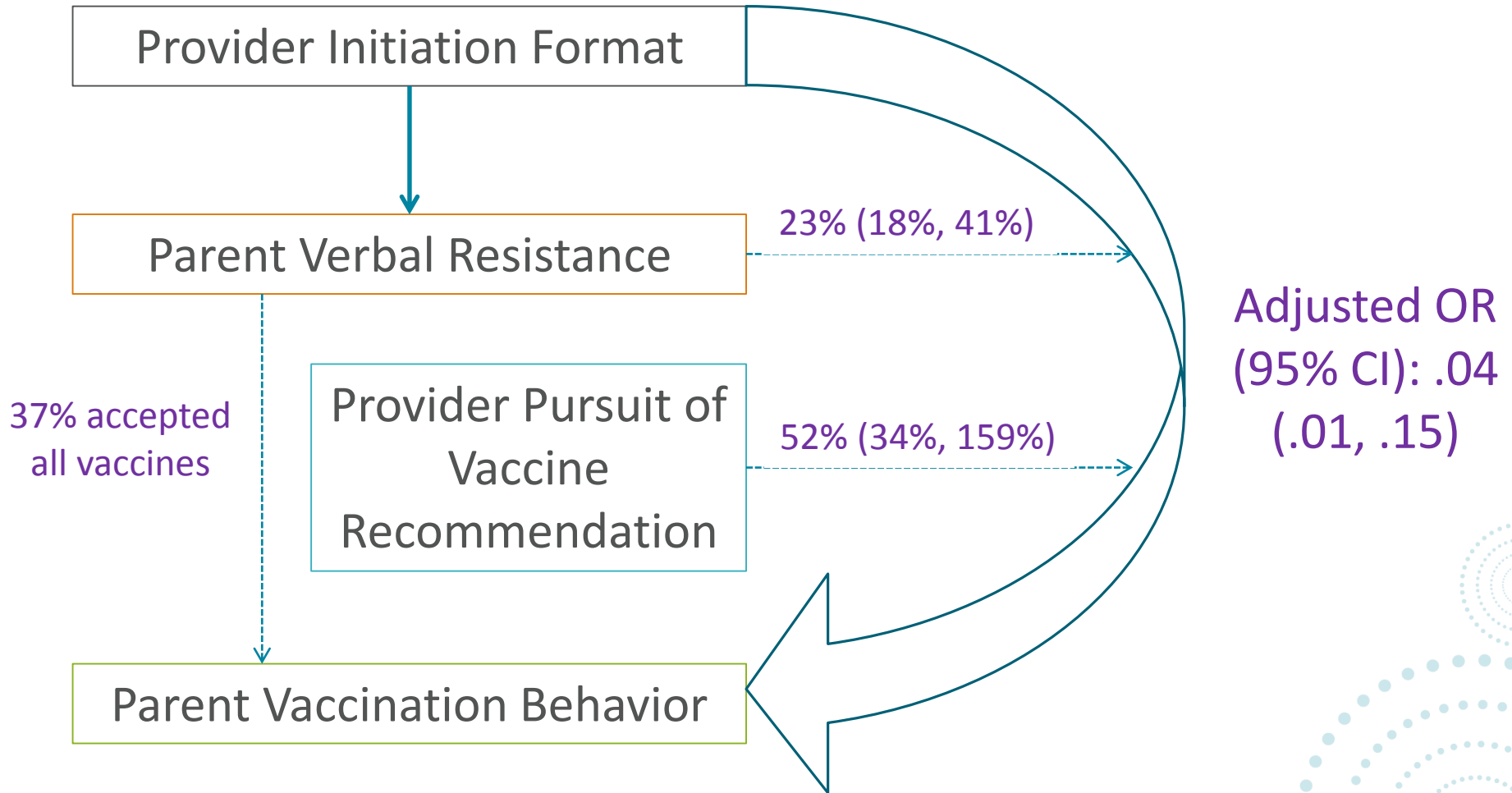
"How do you feel about vaccination?"

How does PARENT respond to the provider's initiation?

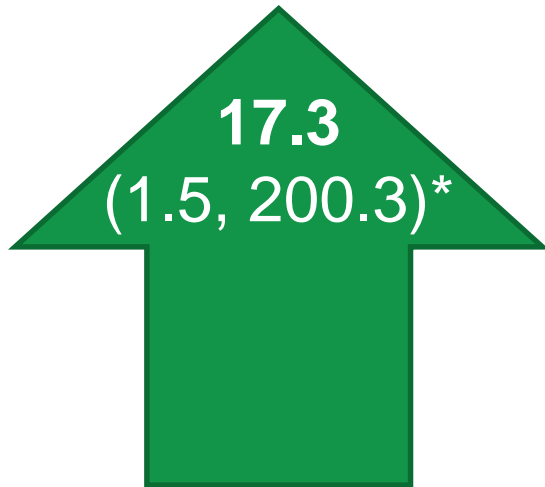


P<.001; Adjusted OR (95% CI): 17.5 (1.2, 253.4)

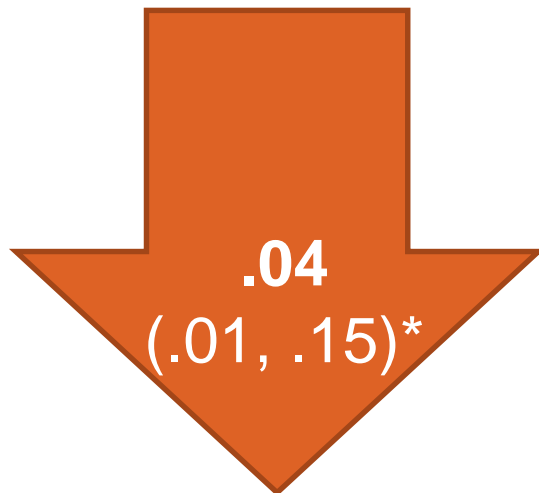
The Importance of Pursuing a Parent's Initial Resistance



The Paradox of Taking a Participatory Approach



Increased odds of having a parent rate their visit experience highly



Decreased odds of having a parent accept all vaccines at the end of the visit

Mutually exclusive outcomes?

Conclusions

- PACV available for use in research setting: djopel@uw.edu
- Don't be afraid to be presumptive when discussing vaccines with parents.
 - “Johnny is going to get 3 recommended vaccines today.”
 - “She’s due for shots today, is that alright?”
- Don't “let a sleeping dog lie”! If you are going to take a participatory approach, pursue vaccines when parents resist!
 - “He really needs these shots”
 - “If he was my child I would definitely go ahead”



Questions?



The Default Option and Decision-making

- Human decision-making is prone to a few pitfalls
 - Status quo bias: an aversion to change
 - Greater fear of an error of commission (choosing a bad option) than of similar errors of omission (not choosing a better option)

The NEW ENGLAND JOURNAL of MEDICINE

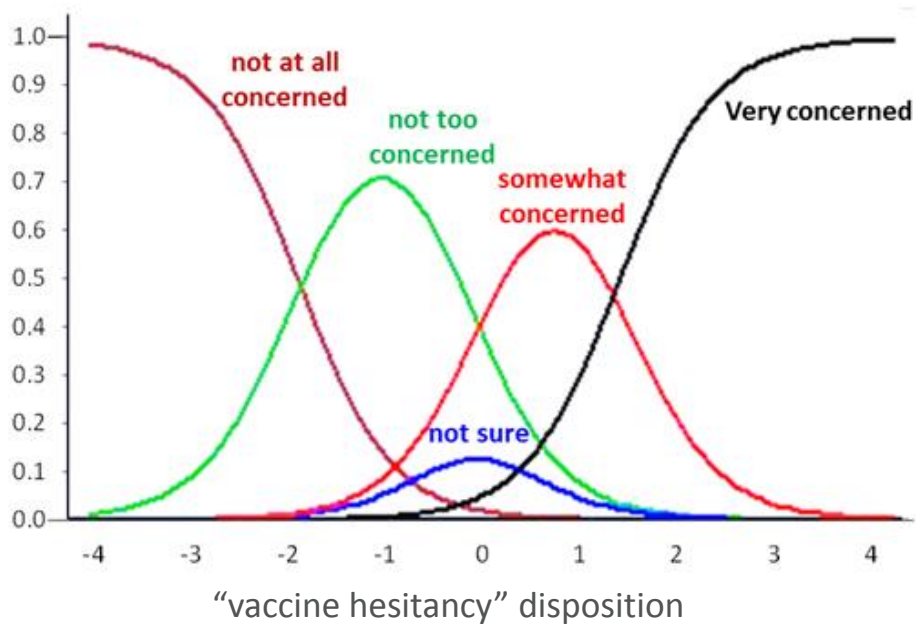
SOUNDING BOARD

Harnessing the Power of Default Options to Improve Health Care

Scott D. Halpern, M.D., Ph.D., Peter A. Ubel, M.D., and David A. Asch, M.D., M.B.A.

Illustrative Item Response Curves

How concerned are you that any one of the childhood shots might not be safe?



I trust the information I receive about shots.

