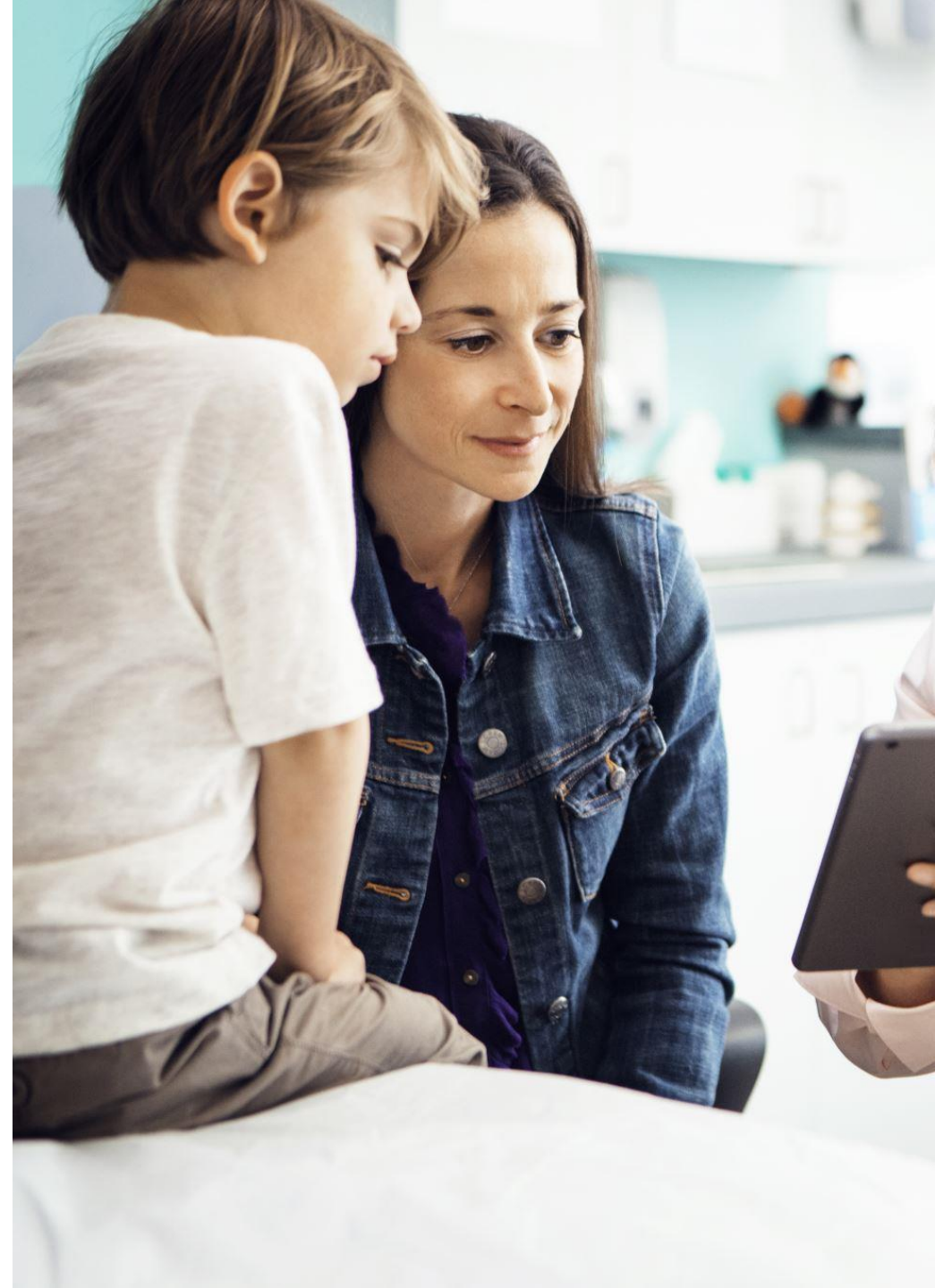




How to Manage Vaccine Hesitancy

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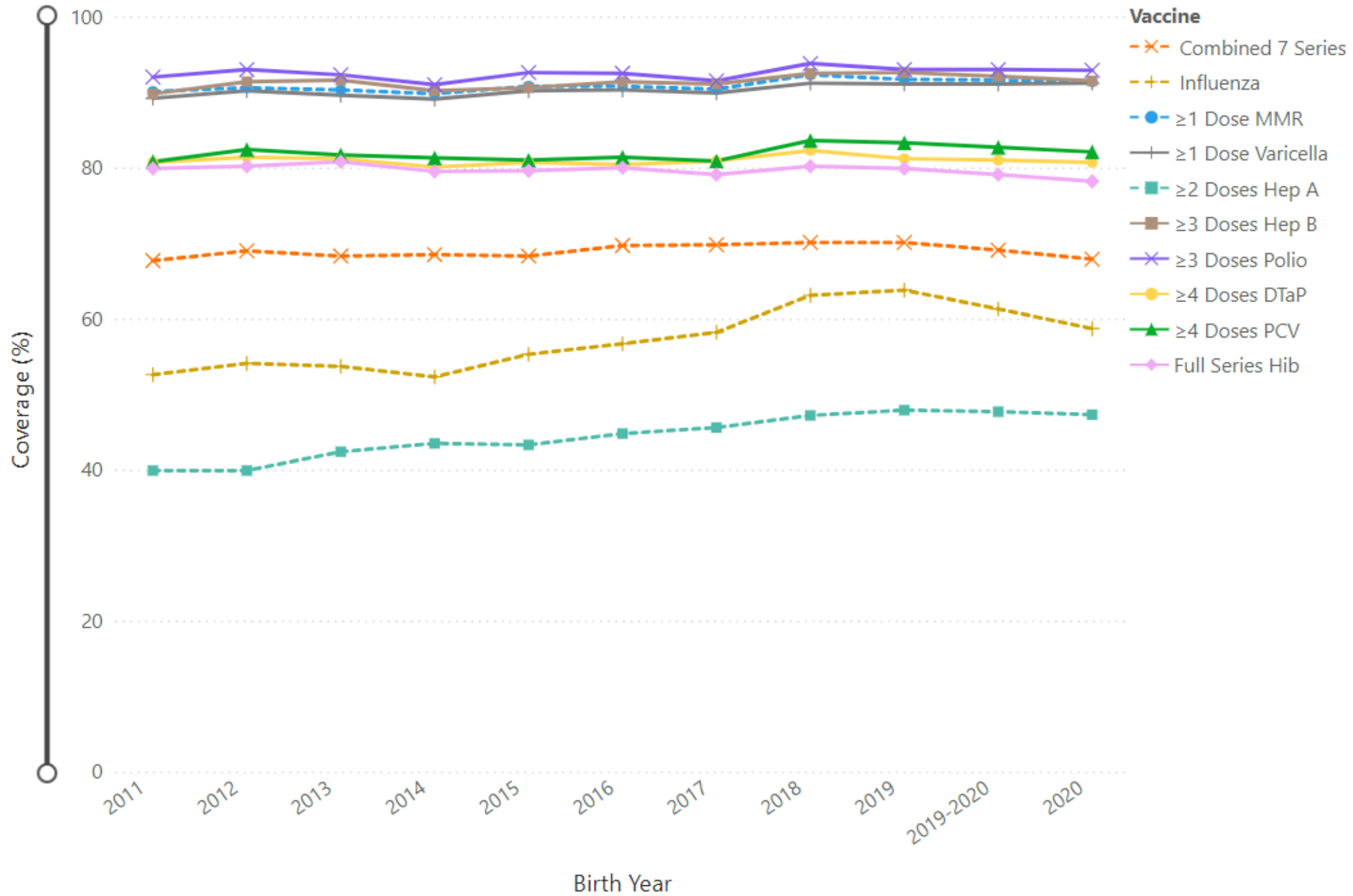


Learning Objectives

- How to **present** a vaccine due
- How to **think** about vaccine refusals
- How to **respond** to vaccine refusals



Vaccination Coverage by Age 24 Months by Birth Year, United States, National Immunization Survey-Child

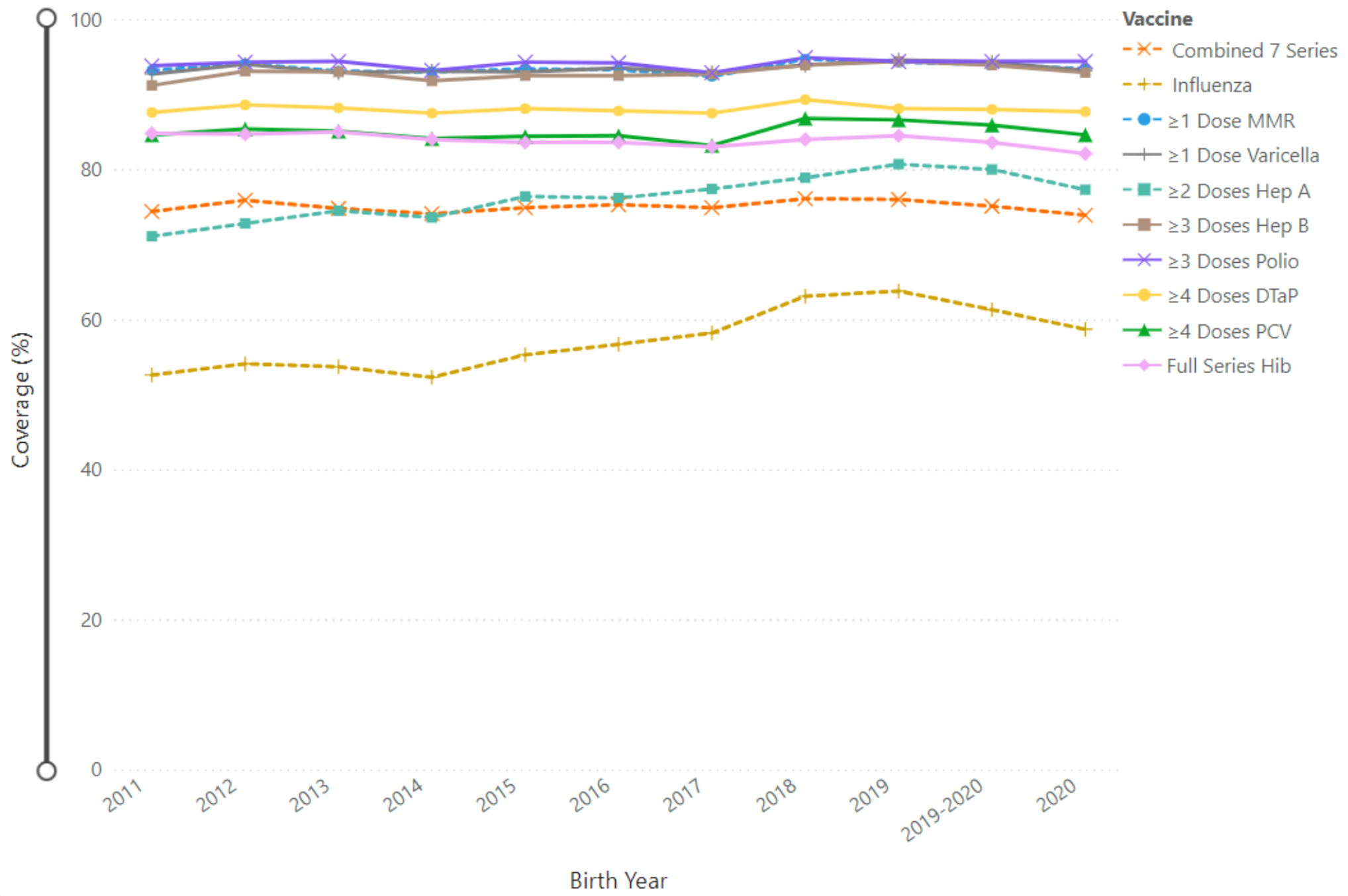


Very Few Have Had **Zero Vaccines** by 24 Months Old

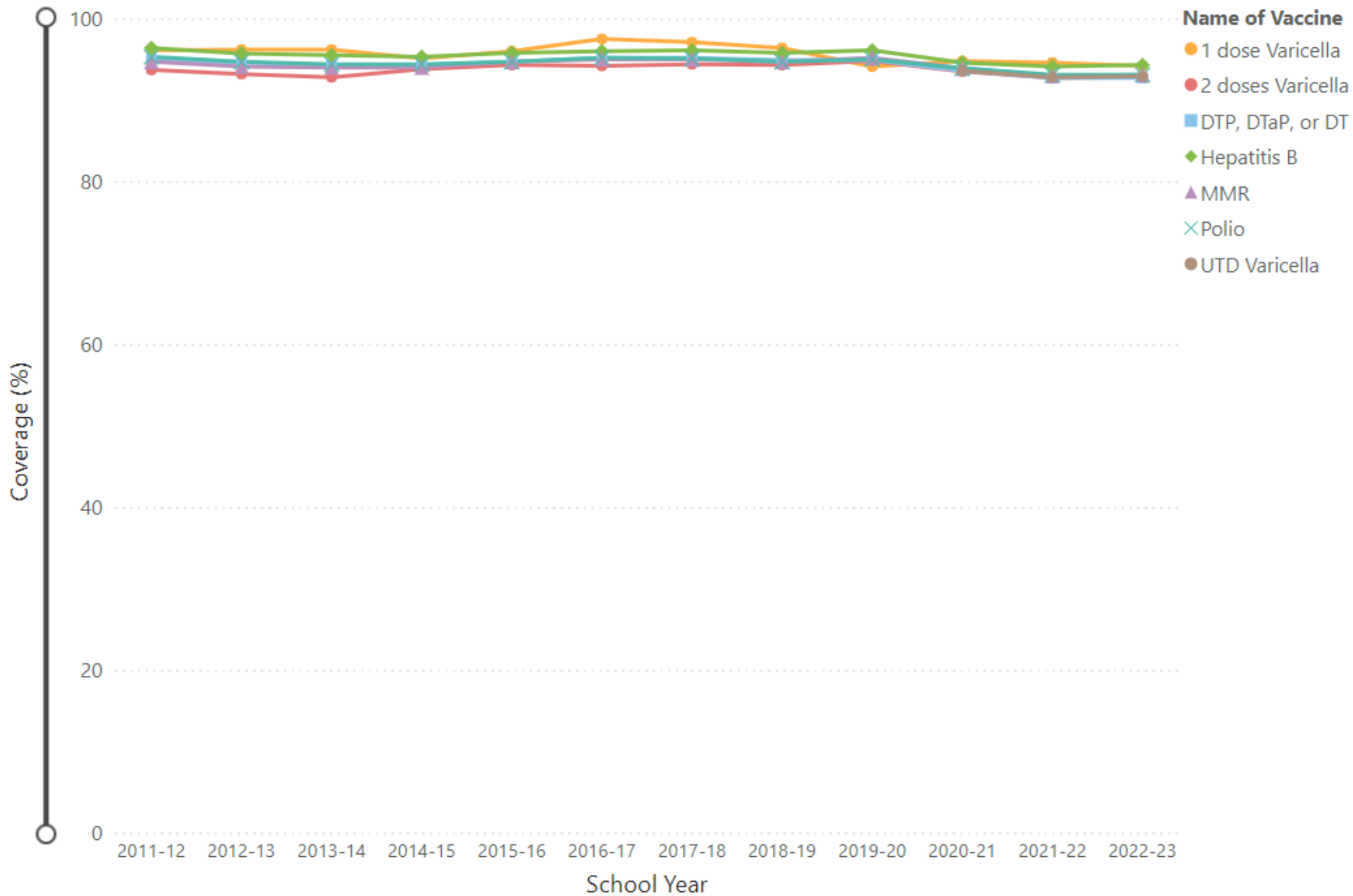
- Zero vaccines rate for birth cohort born in 2020 is 1.0%
- Same as previous birth cohort born in 2019
- Subgroups based on insurance
 - 0.6% with private insurance
 - 1.2% on Medicaid
 - 6.0% with no insurance
- Access and affordability likely more of the issue here



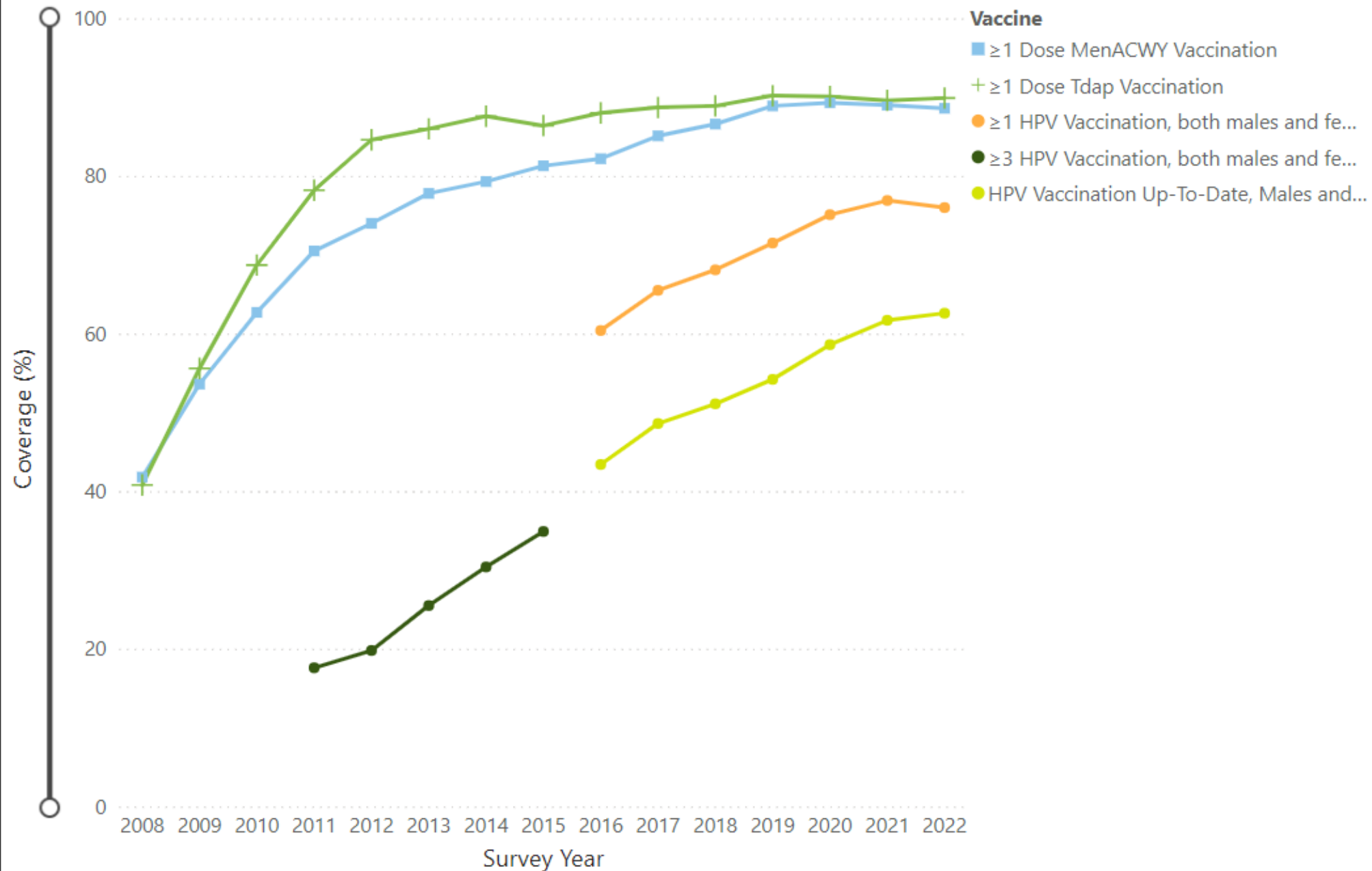
Vaccination Coverage by Age 35 Months by Birth Year, United States, National Immunization Survey-Child



National Vaccination Coverage among Kindergarteners by School Year



Vaccination Coverage by Year among Adolescents Age 13-17 Years, United States, National Immunization Survey-Teen



Seasonal 2023-2024 Influenza Vaccines

- Routinely recommended for all 6 months and older
- Most recent data as of April 6, 2024
- For children 6 months-17 years of age
 - **53%** up to date
 - 55.3% this time last year
 - 62.2% pre-pandemic 2019-2020



Seasonal 2023-2024 COVID-19 Vaccines

- Routinely recommended for all 6 months and older
- Most recent data from November 26-December 30
- For children 6 months-17 years of age
 - **7.5%** up to date
 - 17.1% parents report definitely will get children up-to-date
 - 33.4% parents report probably will get children up-to-date
 - 42.0% parents report probably or definitely will not...



Seasonal 2023-2024 RSV Immunizations

- Routinely recommended for pregnancy 32-6 weeks Sep-Jan
 - Most recent data from January 31
 - **17.8%** up-to-date with RSV vaccine Abryvso™
- For children <8 months old Oct-Mar
 - Most recent data from March 31, 2024
 - **41.3%** up-to-date with RSV immunization nirsevimab



The Politicalization of Routine Vaccination

- The impact of the **pandemic**
- The impact of the vaccines created to control the pandemic
- Counties' voting records correlate with COVID death rates
- Impact on other vaccines as well



Sources of Our **Own** Hesitancy

- The availability heuristic
- The disappearance of the apparent need
- A victim of its own success
- The optimism of presumed herd immunity
- The persistence of false contraindications
- A desire to respect parental autonomy
- A sense that the lack of vaccination resulted from a decision



Managing Our Own Hesitancy, Part One

- Recommendations not just from effectiveness and safety
 - Head-to-head comparisons with placebo
 - Preventing illness in those at risk
 - Comparing adverse events with placebo
- Also based on epidemiologic need and lack of alternative
 - What do US children **need**
 - Disease exposure and occurrence
 - Reasonable alternatives
 - Two dozen FDA licensed vaccines NOT recommended



Managing Our Own Hesitancy, Part Two

- Recommendations **harmonized** with gov't and academies
 - E.g., American Academy of Pediatrics
 - E.g., American College of Physicians
- Vaccines represent the safest of all our medical interventions
- Not driven by profit; most practices break even or lose money
- Government purchases vaccines for half of nation's children
- Providers give these vaccines free of charge
- Vaccine doses once recommended are often dropped



Common Reasons Parents Say Why Child Missed a Vaccine

- Provider/nurse **did not recommend** the vaccine
- Parents did not know the vaccine was recommended
- Parents thought child was too young for the vaccine
- Parents thought child was getting too many vaccines at once
- Parents thought the vaccine was too new
- Parents thought the vaccine was unsafe
- Parents thought the child was not at risk for the disease
- Parents thought the vaccine was unnecessary
- Parents thought it'd be better for child to get natural disease

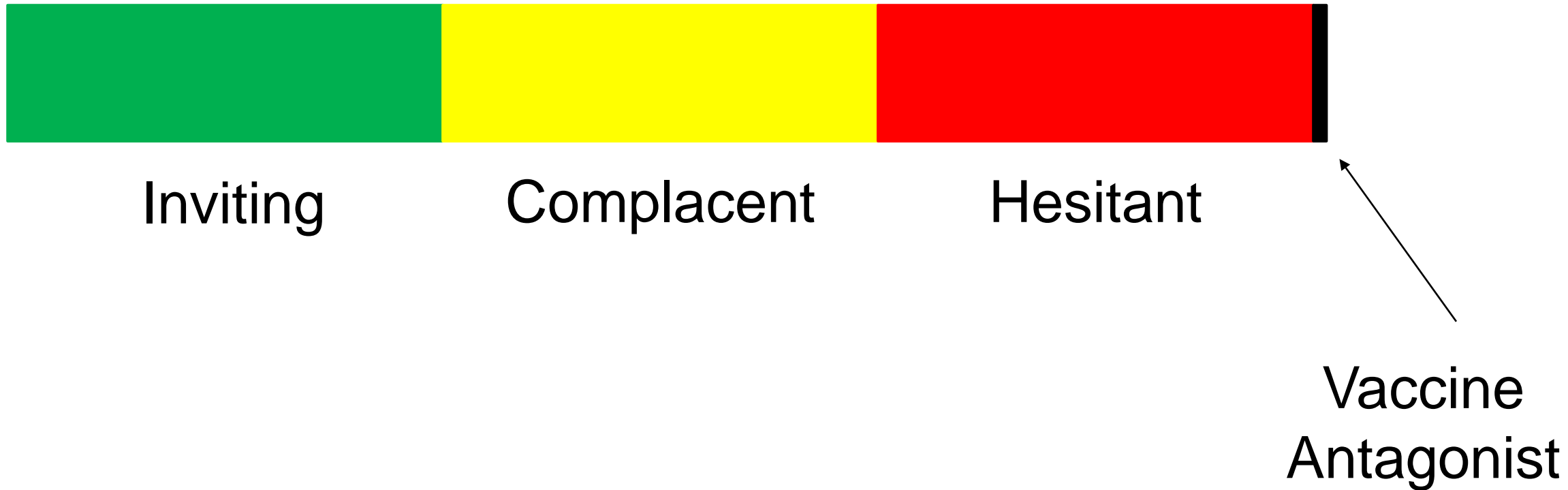


Rarer Reasons Parents Say Why Child Missed a Vaccine

- Provider/nurse recommended NOT to get the vaccine
- Parents thought the vaccine might not work
- Parents have ethical or moral issues with the vaccine
- Parents were concerned about use of fetal tissue
- Parents **distrust the government**
- Parents hold vaccination is contrary to their religious belief



Vaccine Hesitancy: Part Of The Spectrum



In Other Words

- 1/3 seek out the needed vaccines
- 1/3 accept the vaccines recommended at the visit
- 1/3 question the vaccines recommended at a visit
- <1% actively oppose vaccines



First Step in Managing Vaccine Hesitancy is Prevention

- Use every visit; many may only have **this one visit** this year
- Make your recommendations clear
- Use language similar to what you use typically in clinical care
- Avoid language that implies an option



Healthcare Workers' Recommendations Matter Though

- Many studies across many vaccines and ages
 - Gnanasekaran et al 2006
 - Nowalk et al 2007
 - Guerry et al 2011
 - Brewer et al 2011
 - Ylitalo et al 2013
 - Darden et al 2013
 - Jacobson and Darden 2014
- Health care workers' **recommendations** increase uptake

Why Does Our Recommendation Matter?

- Our professional standing
- Our intimate **relationship** to the patient
- Our place as the trusted health advisor



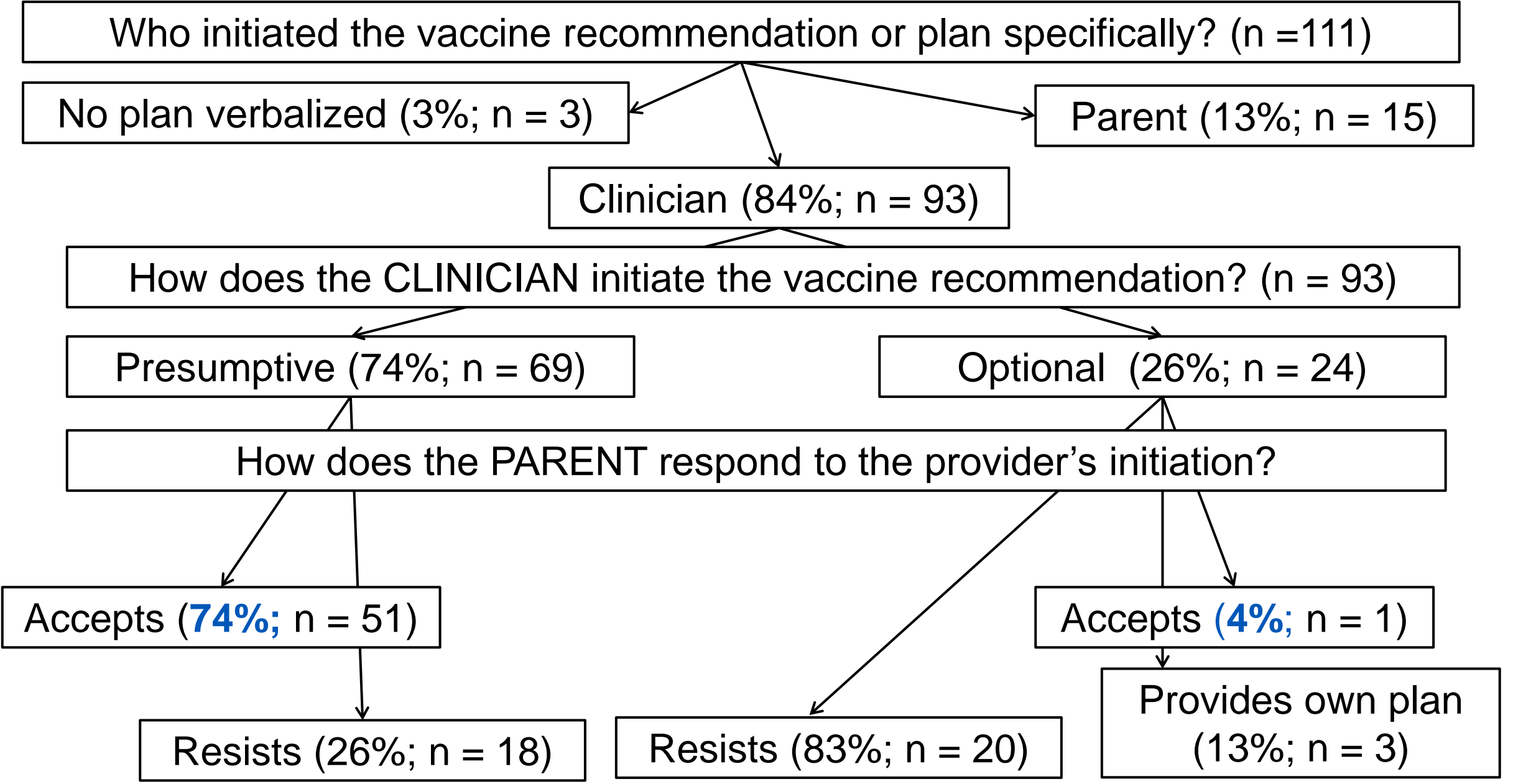
Stronger Recommendations Are Better

- Rosenthal et al in 2011
- 19-to 26-year-old females re HPV vaccine
- 1375 who had received 1 dose in 4 months
- Compared to 1375 who did not
- Rated recommendation 1 thru 5 in strength
 - 1 “did not strongly recommend the vaccine”
 - 5 “strongly recommended the vaccine”
- Strong recommendation **4 times more likely** to get vaccine

But What Makes A Recommendation Strong?

- Opel et al *Pediatrics* in 2013
- 111 parents of children aged 1 to 19 months old
- Oversampled vaccine hesitant parents
- Videotaped health-maintenance visits
- 74% providers **presumptive language**
 - E.g., “Well, we have to do some shots”
- 26% **optional language**,
 - E.g, “What do you want to do about shots?”
- Odds of parents accepting if presumptive 17.5 times more!





Examples of Presumptive Language

- “Your child **is due** for three vaccines today”
- “Your child will get today the two vaccines due”
- “After the exam, we will review the plan & the vaccines due”
- “The nurse will be back with the vaccines due”



Examples of Optional Language

- Would you **like** to get this vaccine?
- What are your plans about the COVID vaccine?
- Were you planning to get any vaccines today?



Studies Have Been Replicated With Same Findings

- Observational studies
 - Sturm et al *J Adolesc Health* 2017 studied 19 pediatricians
 - Hofstetter *Vaccine* 2017 studied 50 visits of 17 clinicians
 - Opel *Academic Pediatrics* 2018 followed 73 families
 - Dempsey et al *Vaccine* 2019 surveyed 777 parents
- **Trials**
 - Brewer et al *Pediatrics* 2017 randomized 30 clinics
 - Dempsey et al *JAMA Pediatr* 2018 randomized 16 clinics
 - Malo et al *Implementation Science* 2018 randomized 20



What Presumptive Language Does

- Makes clear the recommendation for this child
- Makes clear the vaccine is due **now**
- Signals a strong recommendation similar to others
 - “You should bring your child in for an exam”
 - “I should order an x-ray”
 - “We need to refer your child to a specialist”
 - “The nurse will be back to screen vision and hearing”



What To Do When a Parent Says...

- “I promised her she wouldn’t get any vaccines today”
- “We will get only the ones the school **requires**”
- “Our family doesn’t do the flu or the COVID vaccines”
- “We’ll get the vaccines at another visit”



The Pamphlet Approach? Drop It!

- Systematic reviews show that **education** doesn't work
 - Briss et al 2000 across vaccines and across age groups
 - Fu et al 2014 with HPV vaccination in particular
- Nyhan et al showed education can **backfire** & reduce intent
 - Measles, MMR, and autism in 2014
 - Influenza vaccine and its effectiveness in 2015
- Pluviano et al found the backfire effect as well
 - Measles, MMR, and autism in 2017
- Reddinger et al found the same with COVID-19 in 2022



Your Very Next Step

- **Pause**
- Take a deep breath
- Check your own pulse
- Quell your anger, resentment, and disappointment
- Plan to engage the tools of motivational interviewing
 - Rather than engage in a sterile academic argument
 - Commit to the process of empathic clinical care



Engage Your Sympathy For The Parent

- Think of vaccine-hesitant parents as **victims**
 - The anti-vaccine movement has promoted vaccine myths
 - The political climate has colored vaccine decision-making
 - Providers and nurses fail to make clear recommendations
 - Providers and nurses fail to inform them of vaccines due
 - The parent's family may fail to support
 - The parent's family may aggressively oppose



Next

- **Listen** empathically
- Your first goal is not to wait until the parent is done talking
- Your first goal is not to “solve” the parent’s thinking
- Your first goal is to understand what the parent is telling you
- Give them time
- Look at them
- Use body language that permits them to speak
- Consider rephrasing what they just told you
- Listen carefully to how they correct your rephrasing



The C.A.S.E. Approach to Vaccine Hesitancy

- This is the new “C”, informed by motivational interviewing
- **Corroborate** what the parent is telling you
 - Listen
 - Restate
 - Understand
 - Affirm where the parent is



Next, Clear Your Mind and Reset Your Goals

- Consider your role in terms of the parent's role
- The parent's job is to take care of the child's health
- Your job is to track the child's health and make recommendations to help it be its best
- If the A in C.A.S.E., was "About me," it is now "**About us**"



Next, Seek Permission

- “May I have your permission to share what I have found?”
- This is the new S. of the C.A.S.E. approach?
- S is for **Seek Permission to Share**
- This is an important step in motivational interviewing
- This may not be the right time for the parent
- Respect the answer



The Next Steps from There

- If yes, **express** the basis for your recommendation
 - Well-done studies have found the vaccine
 - Effective
 - Safe
 - Needed
 - And without reasonable alternatives
 - You may then learn why the parent is hesitant
 - And you can address that hesitation directly
 - Explaining yourself with evidence-based information



The Next Steps Otherwise

- If no, **express** support for the parent as the decision-maker
- “I want you to be comfortable about the decisions you make”
- “I’m here to help you with those decisions.”
- “I’ll be here for you when you want to discuss this.”



The New C.A.S.E. Approach

- **C**orroborate the parent's hesitancy with active listening
- Make it "**A**bout Us" in terms of your role and the parent's
- **S**eek permission before sharing
- **E**xpress
 - If yes, your explanation with evidence-based information
 - If no, your support for the parent in the parent's role



Supporting Evidence From Cole Et Al., 2022

- Before-and-after study
 - Provider makes strong presumptive statement re vaccine
 - Parent expresses vaccine hesitancy or delay
 - Provider addresses concerns using evidence-based info
- Parents of children 0 to 6 years of age
 - Pre-educational period July 2018-June 2019, N = 2504
 - Post-educational period July 2019-March 2020, N = 1954
- Reduction of parent refusals of childhood vaccines due
 - **31.5**/100 children reduced to **17.5** refusals/100 children



Summary

- How to **present** a vaccine due
 - Use presumptive language
- How to **think** about vaccine refusals
 - Not as a problem with education
- How to **respond** to vaccine refusals
 - Modify your C.A.S.E. approach
 - Utilize motivational interviewing

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