



# Making Strong Recommendations for Vaccination & Having Successful Conversations with Parents Hesitant about Vaccines

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**Southeast  
Minnesota  
Immunization  
Connection**



# DISCLOSURES

- Potential conflicts
  - Safety review committees
    - Gardasil® **4vHPV** in males (Merck)
    - Gardasil®9 **9vHPV** (Merck)
  - Data and safety monitoring board
    - Adult and infant **PCV15** (Merck)
- No off-label use discussion



# LEARNING OBJECTIVES

- Upon completion of this presentation, you will be able to
  - Articulate a **strong** recommendation for a vaccine
  - Convince yourself to **drop** the pamphlet approach
  - Demonstrate the **4 steps** to take with hesitation



# The Problem with Vaccines

- You would think a **measles outbreak** would change everything
  - It isn't now with our 555 cases of measles since January
  - It didn't with our outbreak with Somali Minnesotans in 2017
  - It didn't with the measles outbreaks of 1989-1991
- Vaccine fear, hesitancy, and refusal
  - Problematic **since the invention of vaccines**
  - Jenner, Pasteur, Osler
  - DPT, thimerosal, and Andrew Wakefield

# The Situation in the US

- 1.3% of children less than 2 have received no vaccines so far
- Up from 0.3% in 2001
- 15-35% of vaccinating parents
  - Believe children get more vaccines than are good for them
  - Fear too many vaccines can overwhelm immune system
  - Support allowing unvaccinated children to go to school

# The Mayo Experience

- Our rural Amish
- Our urban Somali Minnesotans
- Our families with autistic children
- Our well-educated parents who know better than us
- Our staff's prejudice against influenza vaccine
- Our profession's failure with the HPV vaccine
- Our research with power of negative thinking
- Our work with our own residents and staff



# REASONS WHY PARENTS EXEMPT

- 57% Vaccine might cause harm
- 38% Better to get natural disease
- 37% My child is not at risk for the disease
- 31% Autism
- 30% Thimerosal
- 29% Disease not dangerous
- 16% Vaccine might not work
- 13% Ethical or moral issues
- 10% Fetal tissue
- 10% To get my child enrolled in school without delay
- 10% Distrust of government
- 1% Contrary to religious belief

# A CHILLING REPORT

- Nyhan et al 2014
- 1759 parents 18 years and older
- Two waves of online messaging
- Randomized 5 different interventions
  - **Info** explaining the lack of evidence **re autism**
  - **Info re dangers** of diseases prevented by MMR
  - **Images of children** w/diseases prevented by MMR
  - **Dramatic narrative** re infant almost died of measles
  - **Control** group



# A BACKFIRE EFFECT

- Results
  - **None** of 4 interventions **increased intent** to vaccinate
  - Info re autism improved expressed knowledge but **decreased intent** to vaccinate
  - Images and narrative **worsened fears** re autism
  - Teaching, even graphic scared straight teaching,
    - Does not work
    - May very well make things worse
  - Education is not enough

# CLINICIAN'S RECOMMENDATIONS MATTER

- 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
- Clinicians' **recommendations** increase vaccination

# WHY DOES OUR RECOMMENDATION MATTER?

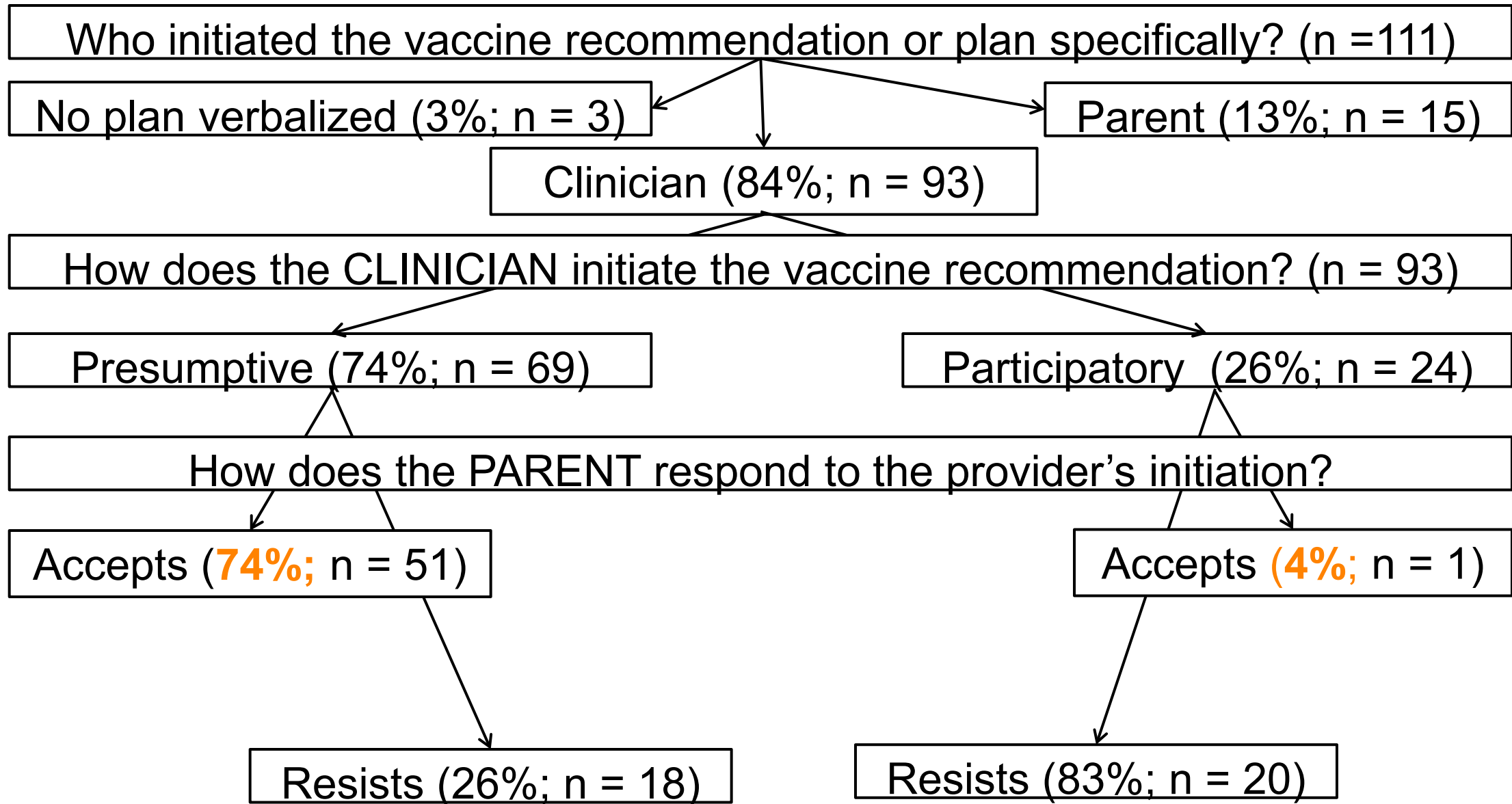
- Our professional standing
- Our intimate relationship to the patient
- Our place as the trusted health advisor

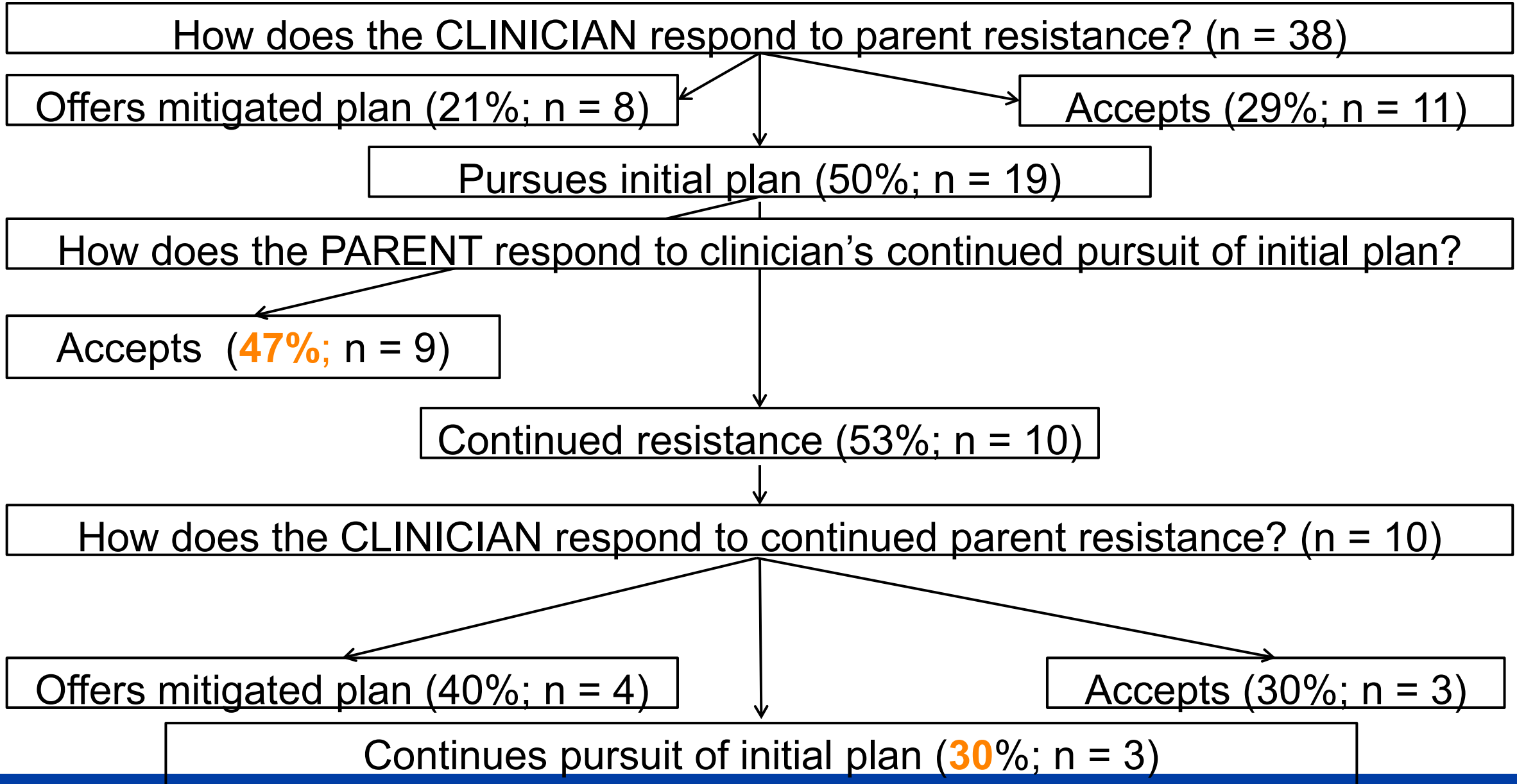
# STRONGER RECOMMENDATIONS ARE BETTER

- 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

# WHAT RECOMMENDATIONS ARE STRONGER?

- 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** (eg, “Well, we have to do some shots”) rather than participatory (eg, “What do you want to do about shots?”)
- Odds of parents accepting if presumptive 17.5 times more than participatory!





# STUDIES HAVE BEEN REPLICATED WITH SAME FINDINGS

- Observational studies
  - Sturm et al *J Adolesc Health* 2017 studied 19 pediatricians
  - Hofstetter *Vaccine* 2017 videotaped 50 visits of 17 clinicians
  - Opel *Academic Pediatrics* 2018 followed cohort of 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 clinics



# PRESUMPTIVE STYLE

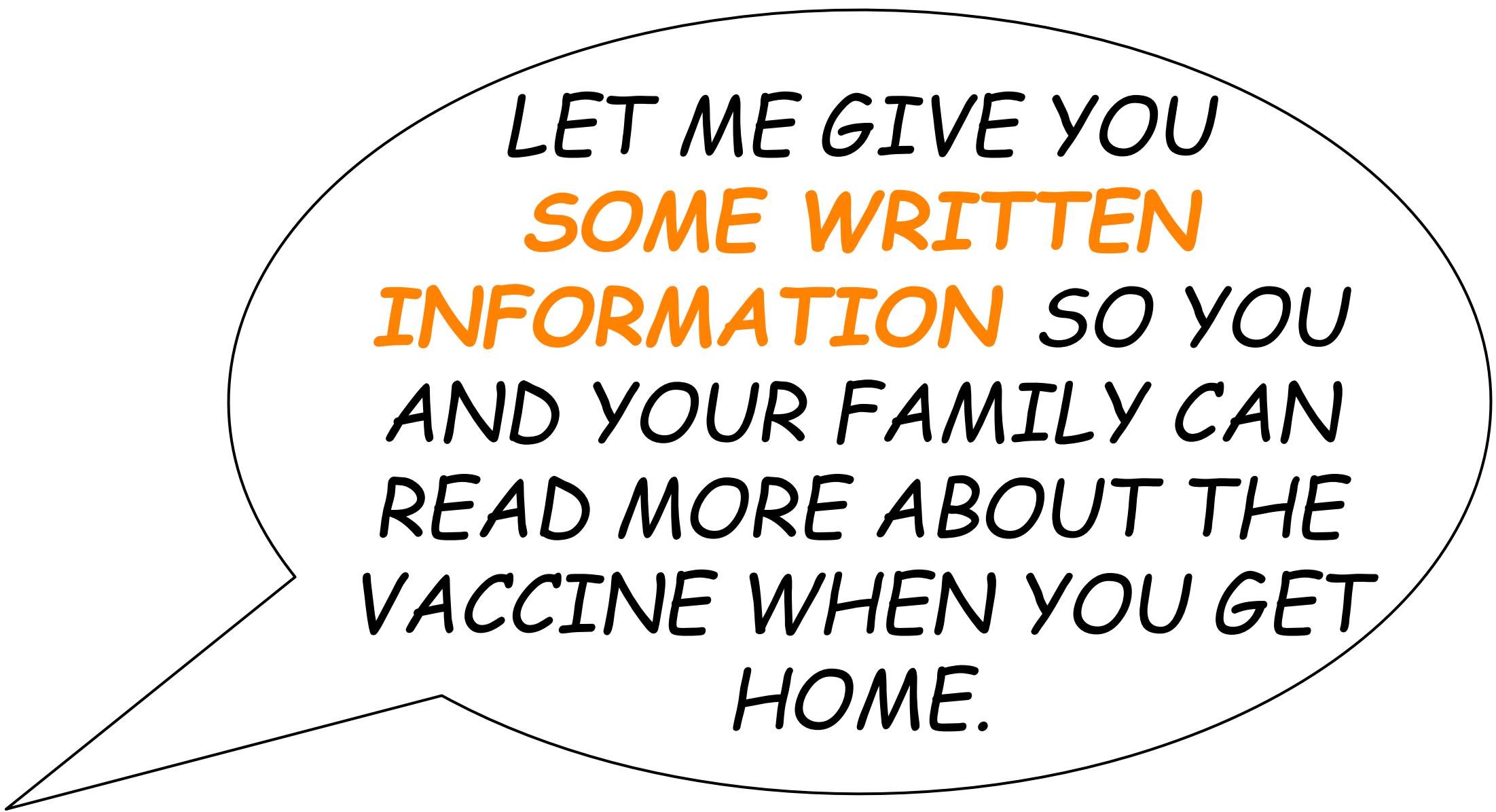
- **Brief** statement
- Reasonable **assumption**
- Parent & patient are **ready** to vaccinate

# PARTICIPATORY STYLE

- The vaccine is **optional**
- I'm offering it as a **choice**
- I don't feel **strongly** about it
- I could go **either way**

WE WANT TO PASS ON  
THE **MMR**  
VACCINE TODAY. THE  
OTHERS ARE FINE.

I AGREE THAT  
THERE'S A LOT TO  
CONSIDER. LET'S TALK  
ABOUT IT FURTHER AT  
OUR **NEXT VISIT!**



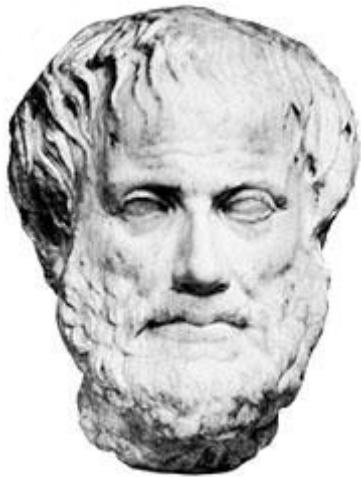
LET ME GIVE YOU  
**SOME WRITTEN  
INFORMATION** SO YOU  
AND YOUR FAMILY CAN  
READ MORE ABOUT THE  
VACCINE WHEN YOU GET  
HOME.

# THE PAMPHLET APPROACH? DROP IT!

- Systematic reviews show that **education** doesn't work to change vaccine status
  - Briss et al 2000
  - Fu et al 2014
- Nyhan et al shows that education **backfires**
  - 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

# SO, HOW TO PERSIST?

- What are the persuasive elements?
- What makes for an effective argument?



- Pathos (passion)
- Ethos (standing)
- Logos (information)
- Telos (purpose)

# ALISON SINGER'S CASE APPROACH

- **C**orroborate(pathos)
- **A**bout Me (ethos)
- **S**cience (logos)
- **E**xplain/Advise (telos)



# THE CASE APPROACH

- A **model** ...
  - ...for talking to the vaccine-hesitant
- A **mnemonic** ...
  - ... to organize a rapid, useful response
- An **brief** technique ...
  - ...to put into use next week!



# THE CASE FOR CASE

- Does more than just exchange information
- Builds on **shared** values and beliefs
- Maintains the **basis** for your advice
- Draws on the **science** but with a focus on your education
- Persists with your **strong** recommendation



# THE CASE ACRONYM

- **C**orroborate
- **A**bout me
- **S**cience
- **E**xplain advice



# THE CASE APPROACH

- **C**orroborate
  - Ask for and acknowledge the person' concern
  - Identify an underlying principle on which you both agree
  - Set the tone for a respectful, successful talk



# THE CASE APPROACH

- Corroborate
- About me
  - Describe what you've done...
  - ...to build your knowledge base
  - Appeal to the reason why...
  - ...the person has sought your advice



# THE CASE APPROACH

- **C**orroborate
- **A**bout me
- **S**cience
  - Relate what the science says, briefly
  - Link that to the concern and the shared principle



# THE CASE APPROACH


- **C**orroborate
- **A**bout me
- **S**cience
- **E**xplain advice
  - In terms of the shared principle
  - Informed by the science
  - Persists in the strong recommendation



WE WANT TO PASS  
ON THE **MMR**  
VACCINE TODAY. THE  
OTHERS ARE FINE.

PLEASE TELL ME WHY  
YOU WANT TO PASS ON  
THE **MMR** VACCINE?





I'M WORRIED THAT IT  
MIGHT CAUSE **AUTISM**.  
THERE'S JUST SO MANY  
UNANSWERED  
QUESTIONS.

IF THE MMR VACCINE COULD  
CAUSE AUTISM, **I WOULDN'T** WANT  
YOUR CHILD TO GET THE MMR  
EITHER.

**AND**  
**JUST LIKE YOU,** I WANT TO DO  
WHATEVER I CAN TO KEEP YOUR  
CHILD HEALTHY AND WELL.

AS A **CLINICIAN**  
COMMITTED TO THE HEALTH  
OF MY PATIENTS, I HAVE BEEN  
FOLLOWING THIS CLAIM FOR  
MANY YEARS NOW AND HAVE  
LEARNED ABOUT THE STUDIES  
THAT TESTED WHETHER THE  
MMR VACCINE CAUSES  
AUTISM.

DOZENS OF VERY LARGE,  
**WELL-DONE STUDIES** HAVE  
SHOWN THAT THE MMR  
VACCINE DOES NOT CAUSE  
AUTISM.

IN FACT, THE STUDIES ABOUT  
AUTISM SHOW THAT CHILDREN  
WHO ARE GOING TO GET AUTISM  
**SHOW THE SIGNS** OF AUTISM  
LONG BEFORE THEY RECEIVE THE  
MMR VACCINE.

ON THE OTHER HAND,  
THE MMR VACCINE PREVENTS  
MEASLES DISEASE, AND I HAVE  
SEEN **HOW SERIOUS** MEASLES  
DISEASE CAN BE.

ONE IN THREE CHILDREN  
GET SO SICK THEY HAVE TO BE  
**HOSPITALIZED. SOME DIE OF**  
MEASLES.

AND THAT IS WHY, AS YOUR  
CHILD'S CLINICIAN, I STRONGLY  
RECOMMEND THE MMR VACCINE  
**TODAY.**



# CASE

- **C**orroborate
  - Ask why specifically the hesitation
  - Identify a principle both of you authentically share
- **A**bout me
  - Remind those in the room why they are seeing you
- **S**cience
  - Summarize what you learned about the concern
- **E**xplain advice
  - Explain your advice in terms of the concern, the science

# Summary

- Use the **presumptive** style
  - Signal your strong recommendation for routine vaccination
- **Drop** the pamphlet approach with vaccine hesitancy
- Use the **CASE** approach instead
  - Corroborate
  - About Me
  - Science
  - Explain/Advise