

Dialogue Around Respiratory Illness Treatment: Optimizing Communication with Parents

Rita Mangione-Smith, MD, MPH
Professor and Chief, Division of General Pediatrics & Hospital Medicine
University of Washington, Department of Pediatrics



Disclosures

I have no relevant financial relationships or conflicts of interest to disclose





Presentation Outline

1. Briefly review what we know from prior research

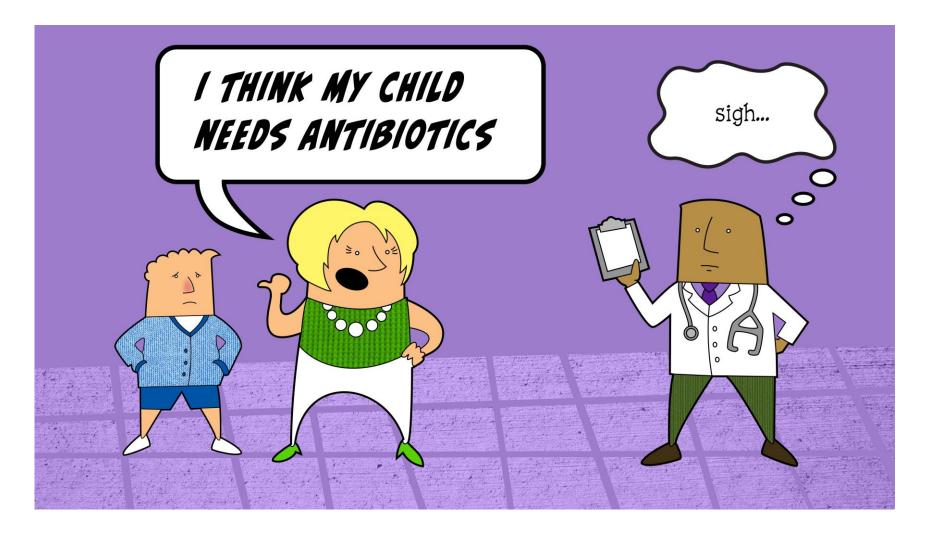
2. Review and discuss video examples of key communication strategies

3. Quick Review and Q&A





What we know from prior research



2. Where any experiments vector project interior interior



Why is this so important?

- 32 million pediatric visits for respiratory conditions result in antibiotic prescriptions annually
 - >70% of outpatient visits where antibiotics are prescribed to children
- Less than 1/3 of these infections are caused by bacteria
 - Estimated 11 million potentially preventable antibiotic prescriptions annually



What does prior research tell us?

- Many parents expect antibiotics for their child's ARTI, but rarely directly ask for them
 - Managing those expectations to avoid unwarranted prescribing is important
- Parents commonly use indirect communication practices that lead us to perceive them as expecting antibiotics
- Perceiving that the child's parent expects to receive antibiotics is a key driver of unwarranted prescribing
- It's important to understand what parent communication practices drive us to perceive them as wanting antibiotics





How do parents *indirectly* communicate expectations for antibiotics?





Understanding Parent Communication

- Parent expectations for antibiotics affect how they communicate during visits
- One place where parents <u>indirectly</u> communicate their expectations for antibiotics is during the <u>presentation of their child's problem</u>
- One type of problem presentation a parent may use when they expect antibiotics is offering a <u>Candidate Diagnosis</u>



Candidate Diagnosis Presentation

- The Candidate Diagnosis can be explicit:
 - The parent actually names a potential diagnosis:

"I'm really worried that she might be coming down with bronchitis.."

- Or implicit.
 - The parent describes symptoms in a way that implies a particular diagnosis: "The stuff coming out of her nose just won't quit and it's getting really thick and green."
 - The parent asserts that someone else in the family, or at school, has been diagnosed with a "sinus infection" or has "strep throat":

"I've heard that a bunch of kids in his class have been out sick with strep throat."



Candidate Diagnoses Signal the Need to Manage Expectations for Antibiotics

- A parent who uses a candidate diagnosis is 25% more likely to expect antibiotics for their child
- There are communication practices you can use to successfully manage these expectations
- Making the case for your diagnosis is important
- How your treatment recommendations are structured is key!





Key communication practices for managing parent expectations:

- #1) Review your PE findings and
- #2) Deliver a clear diagnosis





Making the case for your diagnosis is important

 When you perceive parents as expecting antibiotics for their child, you can decrease unwarranted prescribing by:

#1) Reviewing your physical examination findings

"His ears look good and his lungs sound great - so no ear infection or signs of pneumonia. His nose is pretty congested though and his throat is a little red, but nothing concerning for strep."

#2) Delivering a clear diagnosis

"So what we have here is a really bad cold."





Key communication practices for managing parent expectations:

#3) Use a two part negative/positive treatment recommendation



Treatment Recommendations: What does the Evidence tell us?

Two main ways that we tend to make treatment recommendations during visits for ARTI:

1) Negative treatment recommendations that 'rule out' the need for antibiotics:

"This is just a cold, nothing an antibiotic will touch."

2) Positive treatment recommendations for symptom relief:

"Raising the head of her bed will help with the drainage from her nose when she's sleeping so she won't cough so much."





Treatment Recommendations: What does the evidence tell us?

- Parents generally expect to get advice on how their child's symptoms can be treated
 - Parents are frustrated when the provider only recommends that no treatment is needed
- On their own, negative treatment recommendations increase parent questioning of the treatment plan
 - Shifting provider decision-making into provider-parent negotiation
 - Increasing the probability of unwarranted prescribing
- Parent questioning of the treatment plan
 - Extends the visit length, by forcing providers to re-explain why antibiotics are not needed



Treatment Recommendations: What does the Evidence tell us?

- When combined, a negative treatment recommendation followed by a positive one:
 - Has the lowest association with unwarranted prescribing
 - Has the strongest association with higher parent satisfaction
 - Leads to shorter visit lengths
- A win-win outcome!
- How you structure your treatment recommendation is key



How Treatment Recommendations are Structured is Key

- The tendency for parents to question the treatment plan is more likely to happen in two cases:
 - 1. When the provider **only presents a negative treatment recommendation**
 - 2. When the provider <u>starts with a positive</u> recommendation and <u>ends with a negative</u> recommendation
- How you lay out the overall treatment recommendation is important
 - We recommend <u>always leading with a negative and ending with a positive</u> <u>treatment recommendation</u>



How Treatment Recommendations are Structured is Key

- It's important not to provide an open space for parents to respond to the negative part of your treatment recommendation
- How can you prevent this from happening?
 - By using the following type of structure:
 - "On the one hand antibiotics won't help him get better" {negative treatment recommendation}
 - "On the other hand, there are lots of things you can do to help with his symptoms like giving him a teaspoonful of honey before bedtime to help with the cough...." {positive treatment recommendation}
- This structure decreases the likelihood parents will interrupt and question the negative recommendation





Key communication practices for managing parent expectations:

#4) Providing a contingency plan



Provider Communication and Parent Satisfaction

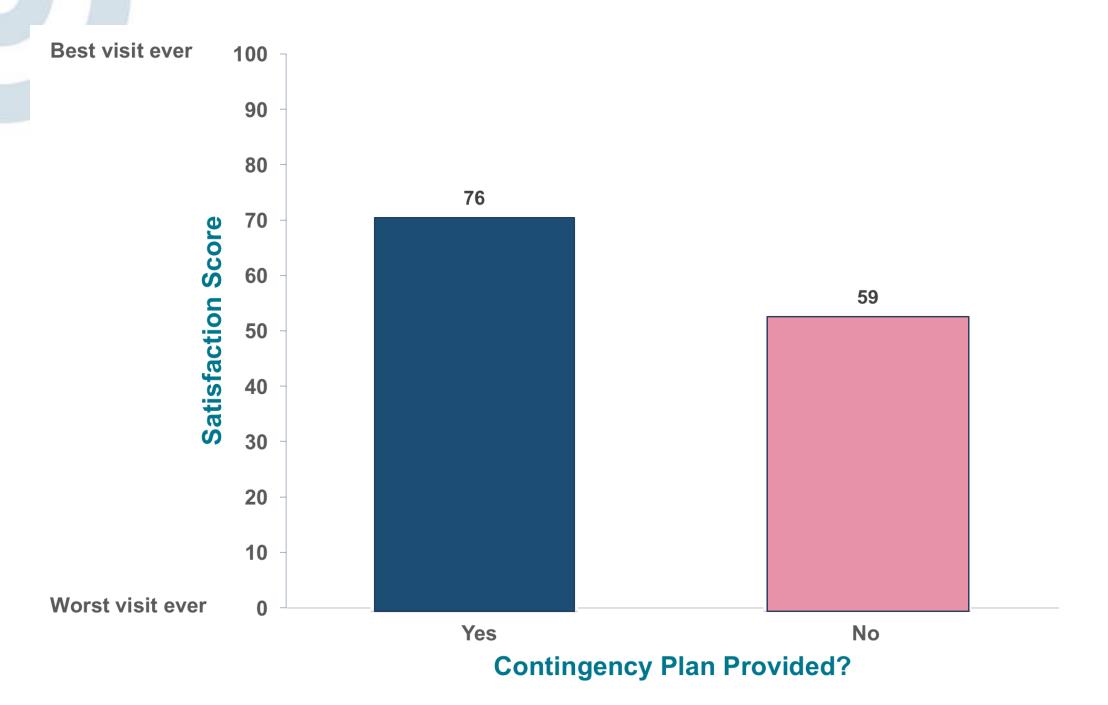
Parents are more satisfied with their child's visit when the provider outlines a *Contingency Plan*

- Contingency Plans involve indicating that if the child doesn't improve in the next few days, the parent should re-contact you and the treatment plan may change
- Re-contact can be via telephone or a return visit

"Definitely call me if she starts having high fevers or is having a hard time catching her breath. I don't expect that to happen, but that's what you should watch for."



When You Don't Provide Antibiotics Contingency Plans Increase Satisfaction with Care







Video Example #1:

What happens when you only give a negative treatment recommendation?









DOC: So he's got a virus.

Vague diagnosis





DOC: So he's got a virus. Not much we can do about that.

Only provides a Negative Treatment Recommendation





DOC: So he's got a virus. Not much we can do about that.

MOM: But don't you think it might be bronchitis? His cough is so chesty.

Mom challenges the treatment plan by questioning the diagnosis





DOC: So he's got a virus. Not much we can do about that.

MOM: But don't you think it might be bronchitis? His cough is so chesty.

DOC: Even if it is, antibiotics won't help. You just have to wait it out.

Doctor hears candidate diagnosis as an indirect request for antibiotics &

Provides a second, stand-alone Negative Treatment Recommendation





DOC: So he's got a virus. Not much we can do about that.

MOM: But don't you think it might be bronchitis? His cough is so chesty.

DOC: Even if it is, antibiotics won't help. You just have to wait it out.

MOM: Hmmm. That's interesting. Whenever I have bronchitis going on,

my doctor prescribes an antibiotic. So I'm a little surprised to hear

you say that.

Mom continues to question/challenge the treatment plan





DOC: So he's got a virus. Not much we can do about that.

MOM: But don't you think it might be bronchitis? His cough is so chesty.

DOC: Even if it is, antibiotics won't help. You just have to wait it out.

MOM: Hmmm. That's interesting. Whenever I have bronchitis going on,

my doctor prescribes an antibiotic. So I'm a little surprised to hear

you say that.

DOC: Well it can be a different process in adults, but even for adults,

antibiotics really don't help.

MOM: So there isn't anything we can do to help with this terrible

cough? I mean he really isn't sleeping very well.

This cycle continues and escalates:

- 1. Wastes time
- 2. Leads to negotiation
- 3. Leaves parents dissatisfied





Video Example #2:

What happens when you give a positive treatment recommendation first?









DOC:

What I want you to do to make her more comfortable is to give her some Children's Advil every 6 to 8 hours — that'll help with the muscle aching. I also want you to give her some herbal tea with about 1 teaspoonful of honey to help with the cough. Keep that up for the next 2-3 days and I expect that'll be when she will start feeling more herself.

Positive Treatment Recommendation





DOC:

What I want you to do to make her more comfortable is to give her some Children's Advil every 6 to 8 hours – that'll help with the muscle aching. I also want you to give her some herbal tea with about 1 teaspoonful of honey to help with the cough. Keep that up for the next 2-3 days and I expect that'll be when she will start feeling more herself.

MOM:

Okay, we'll give that a try. Should I keep her home from school?

DOC:

That might be sensible while she's dealing with the symptoms.

Mom pursues treatment with a procedural question





DOC: What I want you to do to make her more comfortable is to give her

some Children's Advil every 6 to 8 hours – that'll help with the

muscle aching. I also want you to give her some herbal tea with

about 1 teaspoonful of honey to help with the cough. Keep that up

for the next 2-3 days and I expect that'll be when she will start

feeling more herself.

MOM: Okay, we'll give that a try. Should I keep her home from school?

DOC: That might be sensible while she's dealing with the symptoms.

MOM: What about antibiotics? Could they help her get better faster?

Mom continues to pursue treatment by effectively requesting ABX





DOC: What I want you to do to make her more comfortable is to give her

some Children's Advil every 6 to 8 hours – that'll help with the

muscle aching. I also want you to give her some herbal tea with

about 1 teaspoonful of honey to help with the cough. Keep that up

for the next 2-3 days and I expect that'll be when she will start

feeling more herself.

MOM: Okay, we'll give that a try. Should I keep her home from school?

DOC: That might be sensible while she's dealing with the symptoms.

MOM: What about antibiotics? Could they help her get better faster?

DOC: Well her infection is a viral one, and actually antibiotics

don't have any effect on viruses.

Forces doctor to explain and defend antibiotic prescribing decision



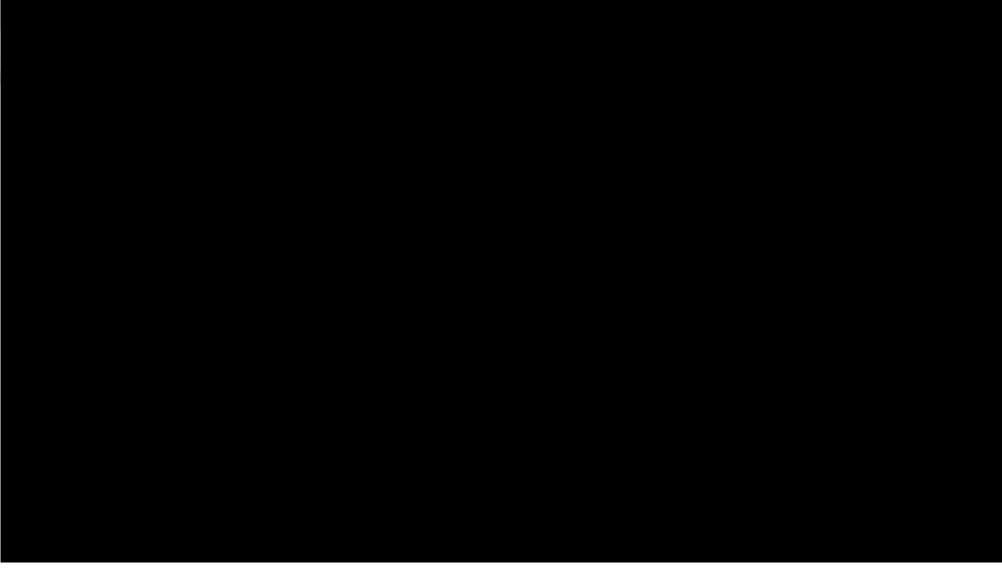


Video Example #3:

What happens when you start with a negative recommendation and end with a positive one?









DOC: So it looks like he has a yucky cold.

Doctor gives a clear diagnosis





DOC:

So it looks like he has a yucky cold. On the one hand, there's no medicine that'll make it go away. Having yellow-green mucous doesn't mean he has a bacterial infection, so antibiotics won't help.

Negative Treatment Recommendation





DOC:

So it looks like he has a yucky cold. On the one hand, there's no medicine that'll make it go away. Having yellow-green mucous doesn't mean he has a bacterial infection, so antibiotics won't help.

Begins with "On the one hand...", which foreshadows more is coming and prevents interruption





DOC:

So it looks like he has a yucky cold. On the one hand, there's no medicine that'll make it go away. Having yellow-green mucous doesn't mean he has a bacterial infection, so antibiotics won't

help. On the other hand, there are a bunch of things you can do to make him feel better.

Continues by foreshadowing positive treatment recommendation





DOC:

So it looks like he has a yucky cold. On the one hand, there's no medicine that'll make it go away. Having yellow-green mucous doesn't mean he has a bacterial infection, so antibiotics won't help. On the other hand, there are a bunch of things you can do to make him feel better.

DAD:

Okay

Note that Dad waits for more





DOC: So it looks like he has a yucky cold. On the one hand, there's no

medicine that'll make it go away. Having yellow-green mucous doesn't mean he has a bacterial infection, so antibiotics won't

help. On the other hand, there are a bunch of things you can do

to make him feel better.

DAD: Okay

DOC: First thing is lots of rest and lots of fluids. Raising his head at

night can help drain his congestion, so you might

give him another pillow. You can also run a humidifier

in his bedroom at night, which can help loosen his

congestion. And a teaspoon of honey can help his

cough.





DOC: So it looks like he has a yucky cold. On the one hand, there's no

medicine that'll make it go away. Having yellow-green mucous

doesn't mean he has a bacterial infection, so antibiotics won't

help. On the other hand, there are a bunch of things you can do

to make him feel better.

DAD: Okay

DOC: First thing is lots of rest and lots of fluids. Raising his head at

night can help drain his congestion, so you might

give him another pillow. You can also run a humidifier

in his bedroom at night, which can help loosen his

congestion. And a teaspoon of honey can help his

cough.

DAD: Alright ____ Dad Accepts; no further pursuit





Putting it all together: What we recommend



How Treatment Recommendations are Structured is Key

What we recommend:

- Keep in mind that the treatment recommendation is <u>one package</u> comprising 4 key parts
- If a parent expects antibiotics and you determine they are unnecessary, you should structure your treatment recommendation so that it includes the following components:
 - 1) Review PE findings to make the case for your diagnosis
 - 2) Deliver the diagnosis
 - 3) Deliver a 2-part treatment recommendation:
 - Negative recommendation followed by a Positive one
 - Use the "On the one hand...On the other hand" structure
 - 4) Provide a contingency plan





Additional Examples

Consider whether the providers in the examples use:

- a) All of the 4 key components
- b) Some of the 4 key components
- c) None of the key components



"What we have here is just a virus – something that antibiotics won't help. This is just something he'll have to fight off on his own."

- a) All of the 4 key components
- b) Some of the 4 key components
- c) None of the 4 key components



"What we have here is just a virus – something that antibiotics won't help. This is just something he'll have to fight off on his own."

- a) All of the 4 key components
- b) Some of the 4 key components
- c) None of the 4 key components



"So his ears and throat look good – no signs of infection there - and his lungs sound good - no wheezing or signs of pneumonia, but he definitely has a stuffy nose. So what I think we have here is the cold that's been going around. What I would suggest is giving him some over-the-counter cough medicine like Robitussin to help with the cough at night."

- a) All of the 4 key components
- b) Some of the 4 key components
- c) None of the 4 key components



"So his ears and throat look good – no signs of infection there - and his lungs sound good - no wheezing or signs of pneumonia, but he definitely has a stuffy nose. So what I think we have here is the cold that's been going around. What I would suggest is giving him some over-the-counter cough medicine like Robitussin to help with the cough at night."

- a) All of the 4 key components
- b) Some of the 4 key components
- c) None of the 4 key components



"Her ears look OK, but she's got a lot of congestion. So this is basically a bad cold. Now even though her ears looked fine today, sometimes things can change overnight with these illnesses. So if she seems worse to you tomorrow or has a high fever over night, we probably need to take another look at her ears. If that happens, be sure to bring her in for another look, OK?"

- a) All of the 4 key components
- b) Some of the 4 key components
- c) None of the 4 key components



"Her ears look OK, but she's got a lot of congestion. So this is basically a bad cold. Now even though her ears looked fine today, sometimes things can change overnight with these illnesses. So if she seems worse to you tomorrow or has a high fever over night, we probably need to take another look at her ears. If that happens, be sure to bring her in for another look, OK?"

- a) All of the 4 key components
- b) Some of the 4 key components
- c) None of the 4 key components



"OK – so really nothing serious going on here. She's got the bug that's been going around. You just need to let this run its course. Her body will fight it off in the next few days – no need for any medicines."

- a) All of the 4 key components
- b) Some of the 4 key components
- c) None of the 4 key components



"OK – so really nothing serious going on here. She's got the bug that's been going around. You just need to let this run its course. Her body will fight it off in the next few days – no need for any medicines."

- a) All of the 4 key components
- b) Some of the 4 key components
- c) None of the 4 key components



"Her ears look good and her lungs sound great, but I definitely see some clear discharge coming out of her nose. So what she has is a really bad cold. On the one hand, there's no good medicine for it, on the other hand I can give you lots of things to do to help her feel better. You can give her a teaspoonful of honey to help with that hacking cough, and try giving her an extra pillow at night to keep the congestion in her nose draining better. Since she's on her 3rd day of this illness, I would expect her to be getting better in 3-4 more days, but I want to hear from you if she's getting worse – like if she develops a high fever – OK?"

- a) All of the 4 key components
- b) Some of the 4 key components
- c) None of the 4 key components



"Her ears look good and her lungs sound great, but I definitely see some clear discharge coming out of her nose. So what she has is a really bad cold. On the one hand, there's no good medicine for it, on the other hand I can give you lots of things to do to help her feel better. You can give her a teaspoonful of honey to help with that hacking cough, and try giving her an extra pillow at night to keep the congestion in her nose draining better. Since she's on her 3rd day of this illness, I would expect her to be getting better in 3-4 more days, but I want to hear from you if she's getting worse – like if she develops a high fever – OK?"

- a) All of the 4 key components
- b) Some of the 4 key components
- c) None of the 4 key components





Your Questions





References

- 1. Hersh AL, Shapiro DJ, Pavia AT, Shah SS. Antibiotic prescribing in ambulatory pediatrics in the United States. *Pediatrics*. Dec 2011;128(6):1053-1061.
- 2. Kronman MP, Zhou C, Mangione-Smith R. Bacterial prevalence and antimicrobial prescribing trends for acute respiratory tract infections. *Pediatrics*. 2014;134(4):e956-965.
- 3. Stivers, T., Mangione-Smith, R., Elliott, MN, McDonald, L, Heritage, J. Why do physicians think parents expect antibiotics? What parents report versus what physicians believe. *J Fam Pract*. 2003; 52(2):140-147
- 4. Mangione-Smith R, Stivers T, Elliott M, McDonald L, Heritage J. Online commentary during the physical examination: a communication tool for avoiding inappropriate antibiotic prescribing? Soc Sci Med. 2003;56(2):313-320.
- 5. Stivers T. Non-antibiotic treatment recommendations: delivery formats and implications for parent resistance. *Soc Sci Med.* 2005;60 949-964.
- 6. Mangione-Smith R, Zhou C, Robinson JD, Taylor JA, Elliott MN, Heritage J. Communication practices and antibiotic use for acute respiratory tract infections in children. *Ann Fam Med*. 2015;13(3):221-227
- 7. Mangione-Smith R, Elliott MN, Stivers T, McDonald LL, Heritage J. Ruling out the need for antibiotics: are we sending the right message? *Arch Pediatr Adolesc Med.* Sep 2006;160(9):945-952.
- Mangione-Smith R, McGlynn EA, Elliott MN, McDonald L, Franz CE, Kravitz RL. Parent expectations for antibiotics, doctor-parent communication, and satisfaction. *Archives of Pediatrics and Adolescent Medicine*. 2001; 155: 800-806.

