DOCTOR: The last time I saw you and your 6-year old son Julio was about 2 months ago?

MOTHER: Um, ya, I think that was our first time here.

DOCTOR: Do you remember if you got an Asthma Action Plan?

MOTHER: Ummmm???

DOCTOR: \* It looks like this?

MOTHER: Oh ya, I was supposed to put it on the refrigerator but I think I lost it.

DOCTOR: No problem. We'll be reviewing this again today... So tell me, has Julio \*been coughing at night?

MOTHER: No, not too much.

DOCTOR: Would you be able to tell me how many nights in a month he coughs?

MOTHER: Well, it's much better than it used to be.

DOCTOR: Can you give me a number?

MOTHER: Hmmm, not too much at all.

DOCTOR: \*So my boss says I have to write down a number here in the chart. So could you try to tell me a number for how many nights in the past 30 days you think he coughed at night? 3-4 nights, 10-15 nights, or like 20 nights?

MOTHER: Oh, maybe 3.

DOCTOR: In a month or in a week?\*

MOTHER: In a week, I guess.

DOCTOR: Okay... in the past one year, how many times has he been to the emergency room for asthma?

MOTHER: Oh it's been a long time...

DOCTOR: How long ago?

MOTHER: Ummm a really long time?

DOCTOR: Is a "long time" 3 months ago or 3 years ago?

MOTHER: Oh only about 2 months ago.

DOCTOR: I see. Can you tell me how many times he had to go to the ER since last

July?

MOTHER: about 4 or 5 times??

DOCTOR: \*Oh, okay... What asthma medicines does he use?

MOTHER: Ummm... he has an orange pump, a red pump, and a blue pump, I think.

DOCTOR: I see. When does he use each of those?

MOTHER: He uses the blue one before school, the orange one when he coughs, and the red one when it is really bad.

DOCTOR: Okay... do you think you could tell me, in your own words, the \*difference between those pumps?

MOTHER: Ummm... let's see... the orange one opens up the lungs, the red one helps the asthma, and the blue one helps prevent asthma from getting worse?

DOCTOR: Well, you have a lot of medicines to try to keep track of, so let's try to organize them for you to make it easier. \*First, let's talk about what the lungs look like... So this is a \*bronchiole, it's a tube that takes air from the outside into your lungs. There are little muscles that wrap around the tube. When that muscle \* tightens around the tube, it makes it hard to \* breathe through the tube. So that's one problem in lungs with asthma. But the real problem is \* inflammation deep inside the lungs--and inflammation means swelling, mucus, thickness, redness, dead cells.

MOTHER: Eww, his lungs has that stuff??!

DOCTOR: Well, everyone with asthma, even when they feel well has at least a little bit of inflammation. This is what it means to have asthma—there are good days and bad days but you have to use medicine everyday, even when you feel well, to **prevent** this inflammation. So that's why we have different kinds of asthma inhalers. We have medicines that help to \* relax the muscle so that he can breathe more easily. That's

what albuterol does. But Albuterol doesn't work on this \* inflammation. That's why he also needs the orange inhaler, which is called Flovent and this one prevents inflammation from getting worse, but you don't feel any better as soon as you take it. In fact, you have to use Flovent-- 2 puffs twice a day everyday for about a month, before it even starts to work. So he needs \* 2 different kinds of inhalers that do \* 2 different jobs.

## MOTHER: Ohhhhh...

DOCTOR: Okay... So let's organize your medicines with \* an Asthma Action Plan. So the \* Green Zone means all is good and this what you do everyday even when he feels well. So which inhaler goes in this part?

MOTHER: The orange one???

DOCTOR: Very good! So he should be taking \* Flovent 2 puffs twice a day everyday. What time will you give him this?

MOTHER: Before school and before bed.

DOCTOR: Can you tell me what time that would be?

MOTHER: Umm, about \* 7 AM and then 8 PM.

DOCTOR: Okay... So then the \*yellow zone means he is starting to have symptoms so you slow down and give the quick relief medicine. Which inhaler should I write in this space?

MOTHER: Umm, the red one?

DOCTOR: Yes, either the red one or the blue one, both are albuterol just different brand names for the same \* medicine. So he can take 2 puffs every 4 hours but only if he coughs or has shortness of breath... Do you happen to know how long it takes for albuterol to work?

MOTHER: You just said it's quick relief...

DOCTOR: Exactly, so about 20 minutes. So watch the clock. If he doesn't feel better after 20 minutes then you can give 2 more puffs. \* After 20 more minutes you can give 2 more puffs. So a total of \* 3 times- at 20 minutes, 40 minutes and 60 minutes. And at the end of 60 minutes, if he is no better, then that means it's time for the \* RED

ZONE and time for a doctor to listen to him. When you go to the ER, he will probably get \* Prednisone.

MOTHER: Oh ya, Prednisone works well for him.

DOCTOR: Yes, Prednisone will fix this inflammation very well, but I am always very concerned about the long-term side effects prednisone whenever someone gets it more than 2 times in a year. So it's important to try to prevent the inflammation with... do you remember which inhaler prevents inflammation?

MOTHER: Flovent?

DOCTOR: Very good! But it only works if he takes it everyday. If he uses the Flovent \*everyday, then hopefully he won't **need** his quick-relief medication. But just in case, you should always have his \* albuterol around in case he has \* symptoms... Albuterol is like a fire extinguisher-- you only use it when there's a fire, but the fire extinguisher doesn't help prevent a fire, right...

MOTHER: (chuckle)

DOCTOR: So do you have a spacer like this?

MOTHER: Yes

DOCTOR: Can you show me how you use it? \*

MOTHER: I shake the pump. I put it in here. I put this (point to mask) around his mouth and nose. Then I pump twice and count to 10.

DOCTOR: Okay, good. \*The only thing I would say to do differently would be to wait about a minute between the 2 puffs.

MOTHER: Okay.

DOCTOR: Does anyone at home smoke cigarettes?

MOTHER: Well, I only smoke in my bedroom with the door closed and the window open, never in front of Julio.

DOCTOR: You know there are about a 100 different chemicals in cigarette smoke and nicotine is only one of them. And even if you're not smoking in front of him, the other

99 chemicals from the cigarette smoke are still on your clothes and your hair. So he's is still being exposed.

MOTHER: Yah, I know.

DOCTOR: \*Have you ever tried to quit before?

MOTHER: I've just smoked for so long that it's really hard to just quit.

DOCTOR: Do you think you could smoke outside instead inside and maybe one less cigarette per day, between now and the next time I see you?

MOTHER: I could do that!

DOCTOR: Great that would be a good start. Okay. Is there a nurse in his school?

MOTHER: Yes.

DOCTOR: Good. Let me fill out this \* form so you can leave an extra spacer and albuterol inhaler for him in the nurse's office. So if he has symptoms in school, he can get 2 puffs and hopefully stay in school for an extra 4 hours.... Also, can I give you a \*calendar for you to keep track of his symptoms?

MOTHER: Sure.

DOCTOR: I want you to mark on each day yes or no-- \*if he coughs at night, if he has daytime symptoms, if needs his albuterol or if he has difficulty with exercise. So next time, when I ask you "how many nights does he cough in a month" you will already have it written down and you won't have to guess, since the number you tell me is very important for me to understand how bad this \* inflammation is.

So you have homework to bring back to me. So from now on, I want to be your asthma doctor and I want to see you every 2-3 months even when he is well. My job is to give you a plan for the next 2-3 months to prevent symptoms and help keep him well and out of the emergency room and in school. Would it be possible for me to see you back in about 6 weeks to make sure this plan is working?

MOTHER: Sure.

DOCTOR: Very good. That was a lot of information. We'll go over it again next time and together we will get very good at controlling Julio's asthma. Thank you for coming and see you in 6 weeks!