### ADVISORY COMMISSION ON CHILDHOOD VACCINES (ACCV)

October 28, 2010

Parklawn Building 5600 Fishers Lane Rockville, Maryland

Proceedings by: CASET Associates, Ltd. Fairfax, Virginia 22030 703-266-8402

#### **Table of Contents**

Agenda Item: Welcome and Chair Report	1
Agenda Item: Approval of September 2010 Minutes	2
Agenda Item: Review of Vaccine Information Statements	2
Agenda Item: Communications and Outreach Workgroup Report/Banyan	
Communications Presentation	43
Agenda Item: ACCV Questions/Comments on Banyan Report	76
Agenda Item: Report from the Division of Vaccine Injury Compensation	105
Agenda Item: Report from the Department of Justice	111
Agenda Item: Adjuvants in Vaccines.	117
Agenda Item: Update on the Center for Biologics, Evaluation and Research (CBER)	,
Food and Drug Administration (FDA) Vaccine Activities	129
Agenda Item: Rotavirus Vaccines and the Vaccine Injury Table	150
Agenda Item: Update on the Immunization Safety Office (ISO), Centers for Disease	
Control and Prevention (CDC) Vaccine Activities	166
Agenda Item: Update on the National Institute of Allergy and Infectious Diseases	
(NIAID), National Institutes of Health (NIH) Vaccine Activities	175
Agenda Item: Update from the National Vaccine Program Office	178
Agenda Item: Public Comment	184
Agenda Item: Future Agenda Items	197

### Agenda Item: Welcome and Chair Report

MS. GALLAGHER: I welcome everybody to today's meeting. I wanted to start off by reading a reminder to everyone about how the committee works. The ACCV is subject to Federal Advisory Committee Act regulations, and one of the primary purposes for the Federal Advisory Committee Act is for committee meetings to be transparent and open to the public.

All preparatory work and even subcommittee or working group meetings can occur outside of the official ACCV meetings. The substantive discussions of the committee should occur during public ACCV meetings like the one we're having today so that the public has the benefit of hearing the full committee discussions and of providing public comment at appropriate times.

Also I want to give a reminder that we retain records of committee meetings. Sometimes HRSA staff receives comments or other statements from members of the public for consideration by the ACCV. These comments become part of the committee records and are shared with all of the committee members. In the event that a member of the public wishes to share information with the committee member, we request that you send it to Andrea Herzog, who will make it part of the committee record and will share the comment with all of the committee members.

In the event that an ACCV member believes that he or she has received correspondence intended for the deliberation of the committee, and not intended for them personally, they can share it with Andrea Herzog who will share it with the committee for consideration as a committee record. So thank you very much for complying with that process in the past and in the future.

# Agenda Item: Approval of September 2010 Minutes

Now I think we should turn our attention to the approval of the September minutes from the meeting.

(Motion to approve meeting minutes made and seconded)

MS. GALLAGHER: Does anybody have any comments? I have one comment, it's very minor, on page 11, the second full paragraph, third line, almost exactly in the middle of that sentence there's an extra "in" and I think grammatically that should just be removed. It's a very minor comment.

Does anyone else have any comments on the minutes? Then all who are in favor of approving please say "aye."

(There was a chorus of "ayes.")

MS. GALLAGHER: Those opposed?

(No response)

## **Agenda Item: Review of Vaccine Information Statements**

MS. GALLAGHER: Okay, the minutes are approved. Now, the

next thing that we're going to move to are the vaccine information statements.

And I believe that Mr. Skip Wolfe is on the telephone. Are you there? Hello, Mr. Wolfe?

MR. WOLFE: (Inaudible)

MS. GALLAGHER: I think you're going to have to pick up the handset. You're breaking up and we're not hearing you.

MR. WOLFE: This is Skip and Jennifer Hamborsky is here. She's the subject matter expert on rotavirus.

MS. GALLAGHER: Oh, great. So we're turning now to the VIS.

And shall I go through page-by-page, or?

MS. HAMBORSKY: Can we start with the rotavirus because we have our subject matter expert here who has to run back over to ACIP?

MS. GALLAGHER: Yes, absolutely.

MS. HAMBORSKY: And I assume that all of the committee members, they were sent some materials to give them some background information about why there was a change to the VIS with the intussusception and the risk. And while we have the subject matter expert here, does anybody have any questions about that related to changes to the VIS?

MR. SCONYERS: I don't know what you mean by that. When we get to the intussusception section, I certainly have some comments.

MS. GALLAGHER: I think the question was do you understand the background, or do you need them to do a review of the background?

MR. SCONYERS: I think we're okay.

MS. GALLAGHER: I think we're okay with the background.

MS. HAMBORSKY: So do we want to just -- oh, and one other thing. There's been an additional change since the version that was sent to you, and that is in section number 5, mild problems. They changed the estimated risk to 1 per 100,000 infants for intussusception. In the version that you have it says 0 to 4, or up to 4. And now it's been changed to 1.

MS. HOIBERG: How did that come about? How did it go from one number to the other?

MARGARET: The first estimate, we were trying with all the documents from FDA and CDC on the website, as well as this document, to have the same numbers to be consistent across all those pieces of information. And those numbers were based on the one study from Mexico that the FDA reviewed and that the FDA used to change the label. And now today at ACIP there will be data presented from a couple of other studies. And so because we can now use those data from a couple other studies, we find that possible estimate to this number.

DR. FISHER: Are you ready for comments otherwise?

MARGARET: Yes.

DR. FISHER: So this is Meg Fisher. Just starting on the very first page, rotavirus is a virus that causes severe diarrhea. I think it would be better to put it the way you have in the other document, and that is include diarrhea

sometimes here. The implication is it always causes severe diarrhea, and that certainly isn't true.

MARGARET: I mean, it is a virus that causes severe diarrhea.

DR. FISHER: See, the problem is the very last sentence there is in the United States and almost all children in the U.S. were infected with rotavirus before their fifth birthday, and certainly most children don't have severe diarrhea.

MARGARET: Well, they are infected, though.

DR. FISHER: Right. So you could make both things be true by just saying it the same way you do in the handout that's for the kids who are getting multiple vaccines, where you say signs and symptoms include diarrhea, in parentheses sometimes severe vomiting and fever.

MR. WOLFE: So just use the same wording that we used in that?

DR. FISHER: Exactly. Thank you.

MR. SCONYERS: This is Jeff Sconyers. In section number 2 of rotavirus vaccine, the fourth paragraph begins a virus or parts of a virus called porcine circovirus -- are you with me? The second sentence of that paragraph says there's no evidence that PCV is a safety risk or causes illness in humans. Has it been studied?

MARGARET: Yes, the FDA has studied that -- and others. There's that summary that the FDA also has on their website.

MR. SCONYERS: So if there's no evidence that it causes, is there evidence that it does not cause illness? It's a very qualified statement and

seems a little bit oblique if you're really trying to say something affirmative.

MARGARET: Well, I think that is the best summary of the data, that there's no evidence from the data available that it's a safety risk. I think it would not be true to say there's absolute proof for anything that there's no risk of anything. So I think you can't rule out something. But that is the wording that is also very similar to the wording that's on the FDA website. And they are the agency that investigated this issue.

MS. BUCK: I think that I would suggest removing the words "is a safety risk" in that sentence. And since we're in that same paragraph, I would also suggest deleting the next sentence. I just think it seems a little much in there. I'm not sure that it's necessary; it seems like a little bit of overkill in there. So, I would have the sentence read there is no evidence that PCV causes illness in humans, and then I would delete the next sentence after that.

MARGARET: One thing maybe Skip was going to add was that this wording was developed in conjunction with several focus groups of parents and physicians. So this has been a multi-month process on refining the wording. And I don't know if Skip has more information on that.

MR. WOLFE: I was going to say the same thing, but that doesn't necessarily mean we have to keep this wording. We'll take your comments under advisement.

I wanted to mention one other thing, that there's been some discussion about whether we ought to use the acronym PCV because people

might confuse it with pneumococcal vaccine. Does the Commission have an opinion on that?

DR. FISHER: I agree with you a hundred percent. You gain absolutely nothing by using it, and you confuse people. So I would absolutely get rid of that. And I think Tawny's right; there's no reason to put that line about it's been shown to be safe and effective, because it's in the very next paragraph.

MR. WOLFE: Okay.

MS. BUCK: Along with that comment then goes to the next paragraph, which again I would suggest the "been remarkably successful" and "it has dramatically," I just would take those words out. I think that in just the straight information statement you shouldn't have verbiage like that in there. I think it's a little bit subjective, and you're going to be a more neutral statement by just removing words like that.

DR. FISHER: On that one I'll disagree with you, Tawny, only because I think this has truly been a remarkable thing. We've seen dramatic -- a 40 percent decrease in hospitalizations across the country. It is truly dramatic.

MS. HOIBERG: I was just going to say it just feels like you're trying so hard to sell this vaccine to parents. To me it just sounds like a sales pitch more than an information sheet.

MS. BUCK: I think for me I would rather hear those statistics, Meg, from my doctor or from someone like you than it being in the information statement is all. Most of them tend to be very neutral and just informative, and it

seems a little out of place to have that in there. I agree that data is something that should be shared; I'm just not sure this is the appropriate place to do it.

MR. WOLFE: What if we include some statistics instead about the reduction of disease, instead of using those terms?

MS. BUCK: I think your whole introduction has that in there.

MS. GALLAGHER: Can I make a suggestion of verbiage? Maybe you can say rotavirus vaccine has been successfully used since 2006, period. It has significantly reduced the number of babies and young children needing clinic and emergency department visits and hospitalization for rotavirus disease. And I think that's perfectly factual, clear and conveys a somewhat neutral message.

MR. WOLFE: "Significantly" is better than "dramatically." That's good. That sounds more scientific anyway.

MS. HOIBERG: I was just going to say, if we could move on to point number 3 if we're done. Is there any way that you could give the two names of the rotavirus vaccines that are available and which ones need the two or which ones need the three doses, or is that not something that you do in the --

MR. WOLFE: We usually don't, unless there's an overwhelming reason to do it. One reason is because I don't think the parents are probably familiar with the names. And since this is designed for parents, I don't think they're familiar with the names of the vaccines, so it might not really add anything important.

MS. HOIBERG: I disagree.

MS. BUCK: I kind of agree with Sarah's statement as well. I think you should be including the names at least at one point in here. I do think it's information that parents should have that they aren't getting. I think they go in, take their kids in for shots, and they kind of know what disease their children are vaccinated for, but they don't really know what was used to vaccinate their children, which I think is a pretty critical piece of information.

MS. HOIBERG: Also because you mentioned that it says that a baby should either get two or three doses, depending on which brand is used. So tell us which one requires two doses and which one requires three doses, that way we can decide, well, I want my kids stuck twice or I want my kid stuck three times. Or, oral, I'm sorry -- given in two little droppers full or three.

MR. MALONE: One thing I would add here is you never know when other brands are going to come along. So I think this is more about telling about the different types, rather than making it brand specific. Plus, we try to avoid using brand names to not give the appearance of endorsing a particular product.

MR. SCONYERS: Could I suggest maybe adding a statement that says ask your provider what vaccine your child is getting and what schedule they should follow, something along those lines.

MS. HOIBERG: That's perfect.

MR. SCONYERS: Parents need to know, am I coming back in for one or for two, just give a reference to talk to the provider. The provider

obviously will know what they're giving.

MR. MALONE: You assume that providers will be doing that anyway, but it can't hurt to mention it here.

MS. HOIBERG: You can't ever assume.

DR. HERR: Just for clarity, some people move, and so they may get one vaccine at one provider and get another vaccine at another provider, and therefore the dosages on those may also vary. But I think it's important that they know what they're getting.

MS. TEMPFER: I agree with what Jeff was saying because I think many providers don't carry both products; you usually only stock one product, and that would cause some confusion, I think, for the provider if parents are specifically asking, but they need to know what they're getting and the dose schedule.

MS. HAMBORSKY: Any other comments on 3? How about 4?

MS. BUCK: On the fourth bullet about babies who are moderately or severely ill, that paragraph, again I just think there towards the end it should be along the same tone as we've been saying, which is if your baby is sick, discuss the decision to vaccinate with your doctor. I think that it's a pretty -- I mean where's the line between mild and moderate illness? And I'm not sure you should be asking parents to make that decision.

MR. MALONE: No, we don't. That's just to inform them that their provider may or may not decide to administer the vaccine that day. The provider

is going to make a clinical decision whether to do it.

MS. BUCK: I just think you're using too much verbiage in the last two sentences. I think you should just say ask your doctor or nurse -- if your child is sick and you're concerned, ask your doctor or nurse. And then your last sentence, again, I just don't think it needs to be in there because I think that conversation should just simply be much more straightforward. If you're concerned about your child's health, you should ask your provider about whether or not they're ready to be immunized.

MR. SCONYERS: One change that would be easy to make here is to change the word "should" to "can." Should is very prescriptive, and can allows parents working with their physicians to make a decision about whether their kids too sick that day to get it.

MR. WOLFE: That makes sense.

MS. BUCK: My only other comment in that section is the last bullet. And I'm sure we're going to get into this again in the next section about intussusception. It's my understanding that intussusception can be fairly serious, and even potentially fatal. Am I correct about that? For me, for one, I think you put it in the mild problems area, but in that last bullet I think you should be more straightforward. If it were me I would say check with your doctor if your baby has ever had intussusception, a type of serious and potentially fatal disorder that has been related to the vaccine, or something like that.

MR. MALONE: In this section we're just asking them to let their

provider know if their child has had it. In the next section we go into a little more detail about what it is. And anybody who's child has had it is going to know that anyway.

MARGARET: There are a lot of different causes of intussusception, and so this is just alerting parents that if your child has ever had this type of bowel blockage in the past from any cause, then your doctor would want to know that. Go tell your doctor.

MS. HOIBERG: Why is it under mild, though? I agree with Tawny.

MR. WOLFE: That's in the next section; that's a different issue.

We may want to change that. We wanted to get the Commission's opinion on whether we ought to call that moderate or severe.

MS. HOIBERG: Severe.

MR. WOLFE: I think it could be either, depending on how it's treated.

MR. SCONYERS: I think anything that potentially causes death is in the severe range.

MS. BUCK: I guess if we want to move into that section, I would agree. I think it has to be moved.

MS. HAMBORSKY: So, just to be clear, the statement that is the last bullet in section 4, that's okay. That's just where we're saying check with your doctor if your baby has ever had it. You're talking about the next paragraph under other problems?

MS. BUCK: Well, I guess before we leave 4, you have the second bullet in there about SCID. I guess this always comes to mind to me, but how is a parent with a young infant supposed to know? Are doctors testing these kids to make sure that they don't have SCID before -- you know, and this also goes with even the severe life-threatening allergy to any component of the vaccine. I think those are -- I realize why those are in there, but in terms of administration of vaccines and children safety, it's very concerning to think that you have issues like this that, I guess, because you're not saying it there's no way to know ahead of time whether your child has got these things?

MR. WOLFE: That's why we say, tell your doctor if you know of any severe allergies your child has. We don't expect them to know, but if they do, rather than list every component of the vaccine and ask if your child is allergic to this, just make a general statement if they know any.

MARGARET: And these would be experiences that the parent had already gone through. So they already know that at some point their child got a vaccine and the doctor said, yes, your child just had a severe allergic reaction to it. So they would remember that. And SCID is a very, very rare disorder and there's only 45 kids a year that are diagnosed with that, so those 45 parents would know that their kid has that if their doctor told them your child has this severe immunodeficiency.

MS. BUCK: Do they know that at two months?

DR. FISHER: The fact is at the moment you wouldn't know it, but

many states are considering adding screening for severe combined immunodeficiency to the routine screening done at birth. So that's actually now a recommendation now that it be added to general screening. I'm not sure all the states are doing it, but I think that you'll see more and more states will start to do it because you're absolutely correct, there's no way you would know if your child had severe combined immunodeficiency, or you might not know by two months.

MR. WOLFE: The point is, because it's a contraindication for the vaccine, we do need to mention it on the VIS, whether or not parents already know whether their kids have it.

DR. HERR: The fact is, there are children these ages -- I have patients myself -- who have these problems at these ages and the parents know. But the thing is it is important that it's reinforced that in these conditions you don't give it. Now, you don't screen everybody, but many of these children are already diagnosed by six months of age. And therefore we need to make sure that we are pre-cautioned about it.

MS. CASTRO-LEWIS: I have one more small comment. I think it would be worth it to add allergic to latex under other severe allergies that the parents know. They might not think that an allergy that a child has would be severe in relation to these vaccines. So just listing, I don't think is enough. I think there should be more examples of that.

MS. BUCK: Maybe there should be some kind of a sentence in there then that just indicates -- I mean, latex isn't the only item in a vaccine that

kids can develop an allergy to, correct? There are other components in the vaccine that they can be allergic to.

DR. FISHER: I think that's why the beginning of the sentence says, tell your doctor if your baby has any severe allergies that you know of.

MR. WOLFE: Then it's up to the doctor to correlate those with the package insert.

MS. BUCK: I don't see that sentence; oh, you mean the last sentence?

MR. SCONYERS: You seem to be inviting comments on the last bullet of this section 4. And I'll say that it doesn't seem strong enough on the intussusception issue. It just says check. And that, when you look at the language you use to talk about SCID, the language doesn't seem consistent with the risk that's associated with it.

MR. WOLFE: That history of intussusception is a precaution, and SCID is a contraindication; that's the difference. We can say tell your doctor instead of check with; it's a little stronger.

MR. SCONYERS: If I could finish my comment, I thought something along the lines of intussusception is a type of severe bowel blockage that may mean your baby should not get this vaccine, ask your provider. You're not saying it's --

MARGARET: I think that the wording -- the providers will have wording that discusses this issue. It's a precaution; it's a several sentence

discussion for the provider on what they should do in these circumstances. But from the parent's perspective, they need to tell their doctor if their baby has ever had it. And then their doctor, in discussion with the parent, would decide what to do with that baby.

MR. SCONYERS: I'm just reflecting this language is mild in terms of warning parents that intussusception may be a risk factor for receiving this vaccine. This is not strong language that says this may present a serious risk to your child. I know we don't know; but it may. I just think it doesn't communicate effectively that this is something that really needs to be discussed.

MS. GALLAGHER: Can I suggest that maybe you can say it is important to tell your doctor if your baby has ever had intussusception. And maybe that gives it more --

MARGARET: It is being reviewed at ACIP this afternoon. It is being proposed; and it is a precaution. And you were all discussing, that's very different than a contraindication. So we have several precautions for these vaccines. This is the one that applies to a parent bringing something up to the provider, and that's why we felt it was important to put it on here now.

MS. GALLAGHER: Right, but I was suggesting the language be it is important to tell your doctor if, as opposed to just tell your doctor.

DR. HERR: Maybe it's just the word check? I mean check is very moderate. Even if you put inform with the fourth and the fifth bullet, it's stronger. They're both serious consequences.

MR. WOLFE: That's stronger.

MS. GALLAGHER: Okay. We weren't arguing about whether it was a precaution or a contraindication; we were just trying to come up with language that would alert parents more to this precaution.

MS. HAMBORSKY: Are we going to go on to five? Okay, so this is the section where we want to decide where we want to do the wording about this not being a mild problem, but a severe problem.

MR. WOLFE: I think if we just add severe, that'd be easy enough.

MS. HAMBORSKY: Just change the header to severe?

DR. HERR: Why have a heading? You have one sentence now with mild, and you have essentially one sentence with minimal, and one serious. Why not just make it a small introductory preface issue?

MR. SCONYERS: I think this is the typical approach.

MR. WOLFE: Forget mild to severe? We can do that.

MS. HAMBORSKY: We can do that. It was just trying to be consistent with all of the other ones, because we kind of left out the mild.

MR. SCONYERS: I think that's a valid point. I think this one should look as much like every other one as you can, or else you're just confusing people. When you change the form you must change the meaning; so don't change the form unless you mean to change the meaning.

MS. GALLAGHER: In what we've received, mild problems, is just standing out there in the same font as everything else, and it doesn't have a

period or a colon after it. So is this not the format?

MS. HAMBORSKY: We sent these in Word for ease of reading instead of final format, which is a PDF document, and it's all formatted with headers, and has circles around it, and bold.

MS. GALLAGHER: Okay. So mild problems will clearly be a header in the PDF version?

MR. WOLFE: Yes.

MS. GALLAGHER: Okay. And then when it comes to severe problems, should you include serious allergic reactions? I'm now asking, if you're going to put a header that's serious, or serious allergic reactions and the risk of death, which is the first paragraph; it seems serious to me.

MR. WOLFE: The first statement is standard on every VIS. And it's because usually severe allergic reactions have not been reported for specific vaccines; so that's a general statement applying to all vaccines. If rotavirus vaccine had a bunch of reports of anaphylaxis, we would have listed that separately.

MS. GALLAGHER: Okay. It's just when I heard there were going to be headers of mild and severe, that sounded severe to me, so.

MR. SCONYERS: So in the paragraph on intussusception that you've added, you refer to a small increase in cases. What's the background rate of intussusception in the population in general?

MARGARET: 34 per 100,000; that's the background. So about

1,900 infants have intussusception in the United States every year without vaccines.

MR. SCONYERS: So a one case per 100,000 increase is about a three percent increase, right?

MARGARET: Yes. They're estimate is about -- yes, exactly, a 2.5 percent increase in number of cases, if there is a risk. We still don't know in the United States if there is or is not a risk, because these data all come from other countries and what we have in the U.S. so far does not demonstrate a risk. But to be on the safest side, we're giving parents as much information as we have. That's why we thought it would be good to put the estimated risk based on the data from the other countries.

MR. SCONYERS: But if the increase in risk is four cases per 100,000, that's almost a 15 percent increase. That's above a ten percent increase. So I didn't understand your discussion earlier.

MARGARET: Okay. The first estimate of that zero to four, that took into account the 99 percent confidence interval from preliminary data from Mexico. And that's all the FDA really could use in their label, were those data that were provided to them by the company. So the FDA came up with that estimate of a risk. Today at ACIP there will be data presented from three other studies. And so based on those data, combined with that first study that the FDA reviewed, then we feel like it's most informative to present the point estimate, the best estimate at this point, rather than this range where it could be zero or it

could be more.

MR. SCONYERS: I'm confused. Is the FDA-approved labeling going to refer to a potential risk of zero to four?

MARGARET: The FDA label says zero to four, yes.

MR. SCONYERS: So your VIS is going to be inconsistent with the approved package label?

MARGARET: Well, because we are addressing both vaccines, and the FDA label is addressing just the one vaccine.

MR. SCONYERS: But don't you think that's likely to confuse the heck out of consumers?

MARGARET: No, I don't think so. I think this is a more refined estimate. And, again, we think for communication purposes the point estimate is a more useful estimate for a parent, rather than saying it could be zero, or it could be four. It's really not a whole lot different as far as for a parent if they're thinking the chance is four in 100,000 versus the chance of 1 in 100,000; it's still quite rare. But we're trying to emphasize that this is the best estimate.

MR. SCONYERS: I'm sorry. I disagree seriously with you about that. I think there's a big difference between an increase of four per 100,000 and one per 100,000. I think anybody would think that a ten or greater percent increase in susceptibility is a significantly increased risk. So I think what you're doing is revolving the risk factors in favor of assuring parents that there isn't a significantly increased risk associated with this vaccine. And that's right if the

risk is one. But if the risk is four per 100,000, then I don't think that's right.

MARGARET: In the U.S. we don't have any data that supports that the risk is as high as four per 100,000 from the data from the U.S. So this is the best information we have looking at both vaccines. Again, the FDA was estimating based on one vaccine. And we have other data from the other vaccine. This VIS is for both vaccines, so this is the best estimate; that's our opinion. But I understand that you have a different opinion.

MS. GALLAGHER: I wanted to bring up two different thoughts about that sentence that starts, "Some studies...". And since it isn't in the U.S., maybe you should start out with, "Some studies outside of the U.S. have shown..." to clarify from the beginning that these are not U.S. babies. And then when you say within a week after the first dose of rotavirus, that confuses when the adverse event occurs with the estimate of risk. And so I think when you say increase in cases of intussusception, then you should have the estimated risk follow that. And then you can say these usually occurred within, or all occurred within a week after the first dose of rotavirus in these studies. But it's confusing because Sherry Drew and I were talking right here about that language. And it makes it sound like every week there's an increased risk. So you can just clarify that by taking it out and putting it in a separate sentence. Those are my two comments.

MS. BUCK: I just wanted to go back to agreeing with Jeff
Sconyers' comments. I actually am far more concerned about the statement of

estimated risk now that I have heard the subject matter expert try to explain it. I'm confused as to how that number has been put in there. And I also have to agree with him that there's a huge difference for parents between zero and four. Additionally, I think in your last sentence you should probably state somewhere that intussusception is -- I hand the wording somewhere and we discussed it once before, but it is serious and even potentially fatal. But I'm very confused from the conversation that just went on about the estimate risk, and not feeling very good about why you've gone to what you've done.

MR. WOLFE: Because it's based on better data.

MARGARET: Based on more data.

MS. HOIBERG: Right, but if your data is not from the FDA, then --

MS. BUCK: You're combining data from two different -- the data is different depending on the vaccine?

MARGARET: No, the data our study is based on -- different countries have studied their data. Different countries use different vaccines. So we use both in our country. So that's why this is an estimate of the overall risk that could be present with either vaccine.

MS. HOIBERG: But it's not accurate, though, because if somebody is going to have one vaccine, then they have a chance of being four in a 100,000. And if they get the other vaccine, then their chances are one in 100,000. So then, again, I ask you to put the two different vaccines that those studies are for. I'm definitely going to choose the one that's one in 100,000 instead of four in

100,000. So, again, you want to be transparent, and you want to be honest and all of that, but you're not being honest, and you're not being transparent, and you're giving false data. And I mean I can tell you this now, if your data does not line up with the FDA, I have a huge problem with that, huge. It's not right.

MARGARET: There are not data that show one vaccine has a higher risk than the other.

MS. HOIBERG: Well then why don't we just leave it at zero and four?

MR. SCONYERS: You do seem to be cherry picking here.

MS. HOIBERG: Yes. So why don't we just go back to it being zero and four and that way it agrees with the FDA?

MR. WOLFE: Because it's not as accurate.

MS. BUCK: Is there a chance that maybe the FDA may change what -- based on the new data that's come out.

MARGARET: They're responsible for the product label, and ACIP reviews data beyond that that's submitted to FDA for the product.

MR. WOLFE: One thing that may be worthwhile knowing is that the FDA, the product labels are kind of like throwing in the kitchen sink. In some ways, frankly, they're less reliable documents than ACIP documents, and that if there's ever basically an assertion of some association with something, it gets thrown into the labeling. And the ACIP makes more of an effort to try and find out is this accurate? Is this actually happening with a particular vaccine? And so

the recommendations that come out of the ACIP are -- to use your term -- refined. And so we would argue that they're actually more accurate, typically, than the labels.

MARGARET: I don't think, at least at CDC here, we were trying to do anything but provide parents with the best estimate that we have on the risk. And I also think having a zero in there, maybe that's not very helpful for a parent either. So I think by us offering the best estimate we have at this moment in that it's one -- it's not zero, and it's not four. But we think the best estimate -- again, we've discussed this internally here to make sure that we are trying to provide the absolute clearest information.

MS. GALLAGHER: Maybe we just take out the word small and just say an increase in cases, and then give the data. Does that --

MARGARET: It is a small increase, so I think that's an important word to keep in there.

MR. SCONYERS: It's not a small increase if it's four per 100,000.

MARGARET: Yes, it still is a small increase; I'm sorry.

MR. SCONYERS: I disagree.

MARGARET: It's still less than ten percent.

MR. SCONYERS: No, it's more than ten percent.

MARGARET: No, it's not.

MR. SCONYERS: I think you've gotten our comments, and we don't agree with you about this, or at least a number of us don't.

DR. EVANS: This is Geoff. I think we have provided you some very useful comments. And unfortunately Marion Gruber can't be here right now, but Marion, who is from CBER, can also provide the information about their perspective, and indeed whether the label might be changing to reflect some of the new information, and so on. So we're missing that aspect of this thing, and hopefully this afternoon she'll be able to enlighten us about that.

But this is also an evolving situation. We have to recognize that, too. There will be additional data that comes in. So I think we need to all keep that in mind. But CDC clearly understands that this is an issue that you have concerns about how it's being characterized.

MS. CASTRO-LEWIS: Just for the record, I totally agree with Jeff's point. It might be for CDC that it statistically is not a significant increase, but for the parents it might be very significant. And I think that's where our concern lies.

MS. GALLAGHER: I just thought we could get past the controversy by not using an adjective to describe it and just give the fact, and then --

MR. WOLFE: That's fine.

MR. SCONYERS: I think we disagree about what the fact is.

MS. HAMBORSKY: Okay. Let's move on to number 6.

MS. GALLAGHER: Okay. What is rotavirus disease and how commonly does it occur? Okay. Does anyone have any comments on that? All right, can we go on to section 7?

MR. WOLFE: Sections 7 and 8 are the same on every VIS.

MR. SCONYERS: Brilliantly stated.

MR. WOLFE: I think that wording came from you.

MS. HAMBORSKY: Okay. Well, Margaret is going to leave us now, and we'll move on to the multi VIS.

MR. WOLFE: We're running over the time you had allotted for us. Is that okay? You could submit written comments if you prefer if we run out of time.

MS. GALLAGHER: No, let's just keep going through. I think this is useful to discuss it.

DR. FISHER: I do have one comment on the immunity from vaccines. It's the very last paragraph on that first page. And it's the second to last line. So the line currently says a child's immune system responds to a vaccine the same way it would respond if a child were exposed to the actual disease. Exposure doesn't make you respond; infection does. So I think you need to change that to if a child had the disease.

MR. WOLFE: Okay. That's more colloquial anyway.

DR. FISHER: Exposure doesn't do it.

MR. WOLFE: Good, thank you.

MS. BUCK: I always have some concerns about that section. I think you've used it in other VISs also. I think that there's probably some difference -- although clearly I'm not a scientist -- about vaccine-induced immunity and natural immunity. I think making a statement saying that they're

the same is probably not being terribly honest.

MR. WOLFE: Well, it's the same as -- people sometimes refer to immunization as some sort of fake immunity. And I think the point we're trying to get across is, without getting into scientific details, is the immune system produces antibodies through the vaccine antigen the same way it would produce antibody to disease antigen. That's the point we're trying to make.

MS. BUCK: You know actually, Skip, that made a lot of sense to me. I suppose that your focus groups and language experts would say that maybe that's not the best way to word it, but I think what you just said was way more straightforward than what you've got worded in here.

MR. WOLFE: Who's talking? Sorry.

MS. BUCK: I'm sorry. Tawny Buck.

MR. WOLFE: Oh, really. Okay. That's good, because we just don't know how much knowledge the average parent would have about things like antibodies and antigens, so we don't want to explain things in a way that's not going to mean anything to people. But as a parent if you understand that --

MS. BUCK: I do think that you, if you're going to go here on one of these, you do have to at least -- I think the idea of trying to play it down to the point that you think people will understand it, to the point that people may actually question whether or not you're being truthful is going to be a problem. Parents do understand with vaccines we have to get boosters. Vaccines don't have a 100 percent rate of effectiveness. So I do think that the paragraph you have

there would probably then draw parents to say, well then why do we go in for booster shots, or why then do sometimes my kids get vaccinated, and then they still get the illness or whatever. I mean, maybe what you said to me was maybe slightly too scientific, but I think the concept, the simplicity with which you stated it to me is a better approach.

MR. WOLFE: Okay. Thanks for the comment. Of course we have to make the VIS understandable to people with all different educations and reading levels, too, but that's worth considering. Even if people may not understand what an antigen is or an antibody is, just explaining it that way might give more detail that would --

MS. BUCK: I mean, it would open up a conversation. If they didn't know what you're saying they could say to their doctor what does this mean and there could be a discussion about how a vaccine works and why it works and so forth. And I think that what we should be driving at is getting to these conversations with parents and their practitioners so they have a better understanding of what they're doing, and why they're doing it and how it works.

MR. WOLFE: Okay, thanks.

MS. GALLAGHER: I was playing with the language, and Tawny and Skip listen to this and see if this does it. A child's immune system makes antibodies to a vaccine the same way that it would make antibodies if the child had the disease. This means that he will develop immunity in the same way, but without having to get sick first.

MR. WOLFE: Okay.

MS. BUCK: He may develop immunity, because vaccines aren't a hundred percent effective, correct?

MS. GALLAGHER: Well, he'll develop immunity, but not full immunity. Meg, why don't you clarify?

DR. FISHER: It really is tricky, because, in fact, you can have tetanus and you don't develop antibody against tetanus toxoid. You can have influenza type B and you don't become immune. So you actually can have the disease and not become immune, just like the vaccines aren't perfect; the diseases also aren't perfect. So I think we should keep it the more simplistic way, in a similar way, as opposed to saying absolutes. And, Tawny, it's a good point, because they're not perfect; nothing's perfect.

MS. BUCK: Right. I think if we just said that this means they may develop immunity in the same way. Really isn't that what we're saying? They may develop immunity. They may develop it naturally; they may develop it with a vaccine.

MR. WOLFE: I guess the point here is that if you do develop immunity, it will be developed in the same way that you would develop it to the disease antigen.

MS. BUCK: See, I like that again. I like it when you talk off the cuff, Skip.

DR. HERR: I think your point, though, still for both of you is really

good, especially with the varicella vaccine, I've had many, many parents come in and say I'd rather have my kid get sick, and get the real illness and get the real immunity rather than get the vaccine. And they don't really understand the difference or the benefits.

MR. WOLFE: We'll work on this. Those are all good suggestions.

Charlene, could you send us an email with the language that you suggested? I wasn't able to write fast enough.

MS. GALLAGHER: How about I just read it again slowly, because I don't have anything with me to email you.

MR. WOLFE: Okay.

MS. GALLAGHER: A child's immune system makes antibodies to the vaccine the same way it would make antibodies if the child had the disease. This means he may develop immunity. And then I suggest maybe take it out in the same way, and then just say, dot, dot, dot, but without having to get sick first. You've already said the same way above. So just say this means he may develop immunity, but without having to get sick first.

MR. WOLFE: Okay. Thank you.

DR. HERR: I'm a little concerned. I mean we have to recognize and present the fact that nothing is a hundred percent. However, I'm a little concerned about the way you worded it in saying "may." The next comment is going to be, well, is it likely, or not likely? If it's just maybe, why am I doing this?

MS. GALLAGHER: How about can?

MR. WOLFE: What if we said this means that immunity from vaccines will develop the same way -- something like that?

MS. GALLAGHER: How about should?

MS. CASTRO-LEWIS: What about can? Or what about adding one more sentence: some vaccines will not develop immunity.

MS. GALLAGHER: Well, no, because we're saying the disease sometimes doesn't do it, too. It's more complex than that. Is can a better word than may?

MR. WOLFE: We've might be able to avoid saying will, can, or may altogether by saying something like this means that immunity from vaccines happens the same way as immunity from --

DR. HERR: How about stimulates immunity?

MR. WOLFE: We've got a bunch of options to work with now.

MS. GALLAGHER: Okay. Well, you have our thoughts anyway.

MR. WOLFE: Yes, thank you.

MS. GALLAGHER: Shall we go on to vaccine benefits?

MS. BUCK: In the very beginning section is the only other comment I have on this whole thing, so if that's good with you guys, I'll be quiet after that. But you have a sentence right up there at the top saying combination vaccines are as safe and effective as these vaccines given separately. And I'm wondering, you do have the data to support that, because it seems to me that one of them has some pretty high rates of fever among kids. Is it Pediarix?

MR. WOLFE: ProQuad, the MMRV, has higher rates of febrile seizures after the first dose. But that's not covered on this VIS. Maybe we should say these combination vaccines just to not make the statement too universal.

DR. FISHER: Good idea.

MS. GALLAGHER: Thanks, Skip. Okay. Now we'll go on to vaccine benefits.

MR. SCONYERS: The statistics you give for polio just aren't the ones that are in the IPV VIS. You talk about 37,000 paralyses, and 1,700 deaths per year in the 50's. But in the IPV one you say 20,000 cases of polio a year. The 1916 data you give were 27,000 paralyses and 6,000 deaths. So the statistics just aren't the same.

MR. WOLFE: I'm trying to find the statement in the IPV one.

MR. SCONYERS: It's in paragraph two under history.

MR. WOLFE: Okay. We say early 50's and we say -- okay, we'll check and make sure we're -- we may have gotten statistics from different years or something, but we'll make sure they match.

MR. SCONYERS: They just obviously have to match or else we just confuse the heck out of people.

MS. BERNSTEIN: I have one more comment on this. So the statement, the last sentence in that section: "This has happened in other parts of the world." Actually it's not just other parts of the world; it's happened here, too.

MR. WOLFE: I'm sorry, we can't hear you.

MS. GALLAGHER: I'll repeat it for you. The last sentence says, "This has happened in other parts of the world." And Jessica's point is, no, this has happened here, as well, for instance, in California.

MR. WOLFE: Oh, yes. Good point.

MS. GALLAGHER: So this has happened in other parts of the world and some parts of the U.S.? Thanks, Jessica.

DR. SALMON: I don't mean to disagree with something. I haven't seen all of the California data, but my understanding is that most of the cases are children that are too young to be vaccinated. So, Skip, is that statement, is that really a fair characterization of what happened in California with pertussis, that it was due to -- I mean, I guess it is without vaccination, because they were too young to be vaccinated.

MR. WOLFE: Well, assuming that there's an immunity element in this, then I think it's fair to say that higher vaccination rates could have prevented a lot of that. Maybe that's speculation.

MS. GALLAGHER: That was just a throw away statement by me. I take it back. And if we just say this has happened before, I think that's accurate.

DR. SALMON: As Meg points out, there have certainly been lots of outbreaks where lack of vaccination was the cause.

MS. GALLAGHER: Okay. So I gave a bad example, but the principle was correct. Sorry. Shall we go on to the eight diseases section?

MR. WOLFE: Let me just mention, as we mentioned in that separate document we sent out where we talk about the changes, that most of this has been reviewed by ACCV before when we published the first edition of this. And a lot of it is just rearranged. So a lot of the specific information on diseases and so on is stuff that's already been reviewed. Not that I'm suggesting you don't look at it again.

MR. SCONYERS: Under tetanus, you invited us to comment on the use of the word victim in the last sentence. So I took the challenge, and here's my suggestion for a rewrite of that sentence. About one in five people who get tetanus die from it.

MS. GALLAGHER: How about the beginning? There are two victims -- the sentence before that.

MR. WOLFE: Patient. Although, supposedly, technically there could be people who get this who aren't patients, but that's a technicality I think we can live with.

MS. GALLAGHER: How about the infected person.

MR. WOLFE: Okay. I like infected person. Jennifer, what do you think?

MS. GALLAGHER: Okay. Well, we'll just leave you to maybe find a better substitute for victim.

MS. HOIBERG: Is there a reason that you chose the word victim?

You don't use that in any of your other --

MR. WOLFE: No, we don't. I don't know why, frankly; I'm embarrassed about that.

DR. FISHER: I think we're with you, though. We don't like victim. So person or patient would do it for us.

MR. WOLFE: Okay.

MS. HAMBORSKY: What if we just say it kills one in five?

MR. WOLFE: But it's mentioned another time; we use the word another time. Okay. We'll take victim out and replace it with something better.

MS. HAMBORSKY: Anything in for Hib or hepatitis? Polio? Pneumococcal? Rotavirus?

MR. SCONYERS: Yes, I have one comment on rotavirus. You have a parenthetical up to about 70,000 a year, but I'm not sure what the measuring unit is. Is that worldwide?

MR. WOLFE: All of these figures are U.S. All of those statistics in here are U.S. statistics.

MR. SCONYERS: I don't think that's evident on the face of it, so you might just want to say.

MS. HAMBORSKY: And then we have the table with the routine baby vaccines.

MR. SCONYERS: Under Hep-B and polio, I thought the language - and I know that this is repeated from other statements, but in the other
statements you give more context for an additional dose may be given at

whatever the correct interval is. It just sounded more like, well, you know if you feel like it, it may be given. That's much clearer in the individual VIS for each individual vaccine, but here I just wonder about this use of language. I didn't try to tinker with the Hep-B one, but under polio in the other information column, I wonder about saying if combination vaccines are given, children typically get a fifth dose. I sounded like you were conveying something that I'm sure you don't intend to convey.

DR. FISHER: You might want to say use of a combination vaccine will result in an extra dose being given.

MR. WOLFE: I like that.

MS. HOIBERG: I just have a question under the DTaP, you have under other information, some children should not get pertussis vaccine. These children can get a vaccine called DT. Why, why would they not -- why would some children not get the pertussis vaccine? Is it because they're too young? Is it because they've had an allergic reaction?

MR. WOLFE: Because they've had a reaction, and if you have a certain reaction after a dose, then subsequent doses of pertussis are contraindicated.

MS. HOIBERG: Okay. And you're sure that they know that it was the pertussis? Is that the only one that causes the reaction?

MR. WOLFE: I think there's enough evidence. I don't know if you can say that with 100 percent certainty. But I think there's enough evidence that

it's pretty clear. And this is in the ACIP statements -- it's laid out in more detail in the ACIP statements.

MS. HAMBORSKY: Okay. Are there any other comments on the table?

MS. CASTRO-LEWIS: Yes. I do have another comment on this one. Under the about this vaccine information statement, the second paragraph: "The vaccine information statement tells you about," and then the paragraph continues describing what is included in the statement. And what you said that is going to be included here doesn't match the titles of what is included in the actual statement. So I would like to suggest to review that so the titles match so it makes it easier for people to follow what you are going to include in here. For example, you have a title here of precautions, and that is not included in what is included in this statement. So, it's just formatting and to make it easier.

MR. WOLFE: Could somebody summarize that? We couldn't hear you, I'm sorry. I don't know if it's your microphone or what, but we can't hear you very well.

MS. GALLAGHER: Magna was talking about formatting issues, and she wanted to be sure that the format was such that you could easily follow the various sections. And I think without seeing the PDF, it's hard for us to sort that out.

MR. WOLFE: Yes, I just cut and pasted and it came out kind of weird on the Word document.

MS. CASTRO-LEWIS: No it is -- okay, I'll try again. The statement that you have: "This VIS tells you about the benefits and risks of these six vaccines," which is the second paragraph. Can you see that paragraph? It's in the first page.

MR. WOLFE: We still can't hear you, sorry.

MS. GALLAGHER: On the first page there's a paragraph that starts, "This VIS tells you about the benefits and risks of these six vaccines."

MS. HAMBORKSY: Oh, okay. And it says DTaP, polio, and rotavirus. So you just think the order of the tables should be the same as the order of these boxes?

MS. CASTRO-LEWIS: What I'm saying -- can you hear me now?

MR. WOLFE: A little better.

MS. CASTRO-LEWIS: All I'm saying is that what you're saying that is included in this vaccine information statement, the little sections contains information about reporting an adverse reaction, and about the National Vaccine Injury Compensation Program, and how to get more information, et cetera. These sections that you're saying that are included here are not clear in the whole vaccine information statement. The titles do not correspond. So I could send you an email, probably would be simpler.

MS. GALLAGHER: In that paragraph where you say this VIS tells you, and then it goes on to say what it tells you, she's saying that in the individual VISs there are different headings than you have indicated here, and maybe you

should refer to the heading so that there's not a disconnect between the two documents. Does that make it clearer?

MS. CASTRO-LEWIS: It's between the document; it's not two documents.

MS. GALLAGHER: Oh, it's further in this document the headings don't match what you've said in this paragraph.

MS. CASTRO-LEWIS: So this title precautions, for example, it doesn't here say that it's going to be included. It's just a matter of formatting and revising how you're going to present the information to make it easier for the person to say, oh, it's information about risk, but where is the title that says that. So it's just --

MS. GALLAGHER: So, she's saying that this paragraph that says what you're going to tell them should match the titles in the rest of the document. Did I get it right, Magda.

MS. CASTRO-LEWIS: I'll send an email.

MR. WOLFE: Okay. This is just sort of a summary. We didn't intend it to actually mention every section, just sort of a general statement about what the VIS is intended to do. But we'll look at the email.

MS. HOIBERG: Are we on risks right now?

MR. SCONYERS: I had a comment on precautions. So the first paragraph of precautions: "Most babies can get all of these vaccines, but some babies should not get certain vaccines." Or the decision should be made, not by

your provider, but after talking with your provider. It's not the provider's decision; it's the parent's decision.

MR. WOLFE: Okay.

MS. GALLAGHER: Anything else on precautions? Okay, can we go on to risks?

MS. HOIBERG: Under DTaP vaccine, I really, really have a problem with under serious problems after it says long-term seizures, coma, lower conscious, and permanent brain damage have been reported, they've been reported so rarely that it's hard to tell whether they were actually caused by vaccination or just happened to occur afterwards. As a parent of a vaccine-injured child that happened to be damaged by this vaccine, and because this program was founded not on the DTaP, but on the DTP, I really find that not to be true.

MR. WOLFE: What if we left out the last sentence?

MS. HOIBERG: Yes, please. Yes, I don't like the whole thing they've been reported so rarely, because that's not true. They're reported. I mean, you know, not a ton, but so rarely is a little bit exaggerated.

MR. WOLFE: I think if we leave out the last sentence we haven't lost anything important.

MS. GALLAGHER: Okay, thank you. Any other comments on risk?

MR. SCONYERS: Under the next paragraph, the IPV, Hep-B, Hib

vaccine, I thought that sentence was confusing because it was a little bit run-on. So I suggest ending the first sentence after "mild problems other than local reactions," and then starting a new sentence that says, "There are no moderate or serious problems reported with these vaccines."

MR. WOLFE: Okay.

MR. SCONYERS: We've already talked about the rotavirus and intussusception issues that you're reporting the statistics, so I don't think we need to go back over that.

MR. WOLFE: Okay. And the last parts are the sections that are the same in all VISs: the compensation program, the what if there's a severe reaction, for more information. I mean there's nothing unique in those.

MS. GALLAGHER: Right. But you're going to change it so it doesn't say you can file your -- you can't file a claim through the website is my understanding? The National Vaccine Injury Compensation Program was created. Then it says if you have been injured you can learn about the program - oh, learn about filing a claim. Thank you.

Okay, now, are there any others that we have to do here? I've lost track.

MR. WOLFE: Polio.

MS. GALLAGHER: Okay. Here we go; I have it.

MR. WOLFE: And let me just mention the reason for changing it.

Not a lot has really changed about polio. We got a call saying that some patients

and providers, the extra dose -- it was a combination vaccine, because when we originally created this, combinations didn't exist. So, we wanted to have a section here like we did with the one cell in the table in the last one we viewed saying that a combination vaccine, you might have to get an extra dose. And we can use the same wording that you suggested for that.

MS. HAMBORSKY: And the other major change was taking out the information about OPV, because when this was originally done, OPV was much more recently taken off the market.

MR. SCONYERS: The only comment I have about this one is in paragraph two under your history section, you say, "Polio vaccination was begun in 1955. By 1960 the number of cases had dropped to about 3,000. By '79 there were only about ten." Per what? I'm assuming that's per year, but you don't say.

MR. WOLFE: Oh, okay. Yes.

DR. HERR: You could say the number of annual cases.

MR. SCONYERS: Whatever the reading-level way to say it is.

MS. GALLAGHER: Okay. Are there any others on this VIS? All right, we're done with that one. That was the quickest.

MR. WOLFE: That's it.

DR. FISHER: Thanks, guys.

MR. WOLFE: Thanks a lot.

(Break)

## Agenda Item: Communications and Outreach Workgroup Report/Banyan Communications Presentation

MS. GALLAGHER: Hello, everyone, welcome back. Sorry about the technical difficulties; we accidentally disconnected the line. And now Sarah Hoiberg is going to start out with the communications and outreach working group report from Banyan.

MS. HOIBERG: Good morning, everybody. We've finally come to the day that I know that I've been waiting for a long time, which is to hear from Banyan, their report on their ideas for us for outreach. We have all had the opportunity to review the documents that we've been given. And so we are now looking forward to hearing in person from Merrell and Sally, as well as Nami from Altarum. So, without further ado, I am going to go ahead and turn it over to them.

MS. HANSEN: Good morning ACCV members and other distinguished guests. On behalf of HRSA DVIC we welcome you to our presentation of the Vaccine Injury Compensation Marketing and Outreach Communications Plan. My name is Merrell Hansen from Banyan Communications. I'd like you also to meet my colleagues. Sally Deval is my business partner. And Dr. Namratha Swamy is from the Altarum Institute.

Last fall -- and you're aware of this -- but the Division of Vaccine
Injury Compensation awarded Banyan Communications the privilege of creating
a communications plan for the Vaccine Injury Compensation Program, along with

Altarum Institute, our subcontractor, who carried out the formative research for us. Over the past 12 months I've acted as project director, and along with Sally collaborated on all of the analysis, design and development of the plan, along with our creative teams and other people within Banyan. Dr. Swamy was responsible for the formative phase of our project.

Today Sally, Dr. Swamy -- who from now on I'm going to informally call Nami -- and I will present information contained in the plan on each of the areas that you see on this slide, including research, an overview of the plan, our target audiences, our recommendations for strategies and tactics. We'll also share with you what we believe are important considerations germane to the creation of the VICP messages.

We've estimated that we'll talk to you for up to an hour today. And at that time we'll break, and when we reconvene we're going to look forward to hearing from you your comments, your suggestions and your questions. As you know the plan right now, this is a draft form. And we'll be collecting the information that you share with us for the purposes of ultimately pulling together a final draft for the Division of Vaccine Injury Compensation.

So if you like, as we go through our presentation, please capture any questions that you have. Once we're finished we'll break. You can give us your questions during the break, or right when we come back we can just dig right in; it's your choice.

MR. SCONYERS: I'm sorry. I think our instructions at the start of

this meeting were that we needed to have our conversations and communicate with you during the meeting, not during the break.

MS. HANSEN: Yes. What we're hoping though because of the time constraints is that we could go through the presentation, break, and then come back and devote all that time to questions and answers together in the meeting forum still.

MR. SCONYERS: You just said that we should talk to you during the break.

MS. HANSEN: I'm sorry. I meant right after the break.

So I'm going to turn now over to Sally after we quickly go through some of the presentation objectives today. Obviously we're presenting our plan to you. We're soliciting all of your input. And from that it will enable us to go back and prepare the final iteration of this to deliver to DVIC.

MS. DEVAL: Hello, everybody. My name is Sally. I want to preface what I'm about to say with a little bit if background information. We know that you've been meeting for two days and that this is something that you've been looking forward to. So the plan that you've received was very comprehensive, as I think you mentioned. It's a lot of information. We are not going to go through every page of that plan. It's unnecessary. A lot of the information is there.

While we read, we may refer to it -- we may say please look to this for more. We're not trying to skip over anything because it's not important. But

it's a lot of information. So what we've tried to do is condense it in this

PowerPoint to what we thought ACCV would be most interested in, and I hope
that we've done that very well. We're focusing on the strategies, the tactics,
basically who we're going to reach and how we're going to reach them. There's a
lot more to the plan than what we're presenting today. But I think this is the crux
of what you'll really be most interested in.

Behind me is a typical communications process. And I think many of you will already be very familiar with this. But the reason it's here is to give you some context for where we are and where we're going, which I think will help us in our discussion after the break. As you'll see the first two boxes are colored, so you can get a sense of what our contract was, which was formative research, and then the communications planning. We've really focused on gathering information from the audience through various aspects of formative research that Nami will review, as well as then pulling that research together and coming up with some conclusions that lay the groundwork for the next contractor to come along and then build a communications campaign on.

There are a couple of things I wanted to call out. You'll notice the steps that follow are very methodical, and planned and scheduled. It's a communications campaign, so there's a lot of creativity, a lot of organic discussion, a lot of what some would call creative work and brainstorming involved. But behind that there is a process that is clearly methodical, meticulous, scheduled, and careful. And I think we owe that to this kind of

project. But it also secures the fact that success will happen at the end.

And what I'd like to do is just walk through very quickly what will happen once the plan is approved and we move forward. At that point we would argue the fun work begins. We start to develop the messages, we start to develop the materials. We then take those materials through clearance. And I think that everybody in the room is probably well familiar with what clearance is and what it means, but it's probably worth pointing out that it's a significant process. It's a requirement, and it's an important part, because it really allows the federal government to acknowledge that the information we've developed is appropriate and it's accurate.

As creative as any team could be, we have an obligation to be legally accurate and accurate to the parents who are the beneficiaries of this information. So that's a very important step, and it can take a while. So it's not something that would move very, very quickly.

After we go through clearance we begin the actual production of the materials. Then -- and this is an important step -- it almost continues the formative research in that we begin creative message testing. That's when we show -- let's say they're radio scripts, or let's say they're posters or print ads, whatever they are, they're shown to very specific people who belong to our target audience to find out how did this resonate with you? Is this going to result in an outcome that was intended? If there is an unintended outcome, is it positive or is it negative? And what changes do we have to make to the materials to make

sure that the intended outcome does in fact happen.

In that sense this phase of focus groups is really critical because it allows us even more information from the target audience that helps us develop the final words. We then move on to more clearance, 508 compliance, and a final review. All of the materials are sent through that process very carefully to make sure that they are accessible by everyone with disabilities, and then again the words are accurate. When they emerge from there we make final tweaks, and then there's message dissemination and implementation. And that basically means all the work we've done in forming partnerships and placing the messages are implemented in the markets across the United States.

At that point tracking and evaluation begins where we monitor where the placement of the messages are. And then we step back and evaluate what success happens and what is success.

I do want to point out, because I think it's important, I say "we" because Banyan and Altarum have been very attached to this project and to these first two segments that we have been very proudly involved in. From here DVIC will announce a new solicitation after funding has been solicited, and then a new award will be given to another contractor to continue the work. So we very seriously undertook this plan in order to enable anybody to implement it. So when I say "we" it's merely emotional attachment to seeing this be very successful. Down the road it will probably be any contractor that bids on the work and then is awarded the work.

So that gives you a sense of where we are and what the next steps are. I think we've come a long way and we have so much information. There is more to be done.

I think you're all very familiar with this, but the communications goal under this contract ultimately is to inform target audiences that VICP exists. It literally is the one single goal that all of our planning efforts were directed towards.

When we created the plan we had in our mind that the end results of this plan would enable somebody -- a family member, a friend, a peer, a health care provider -- to know what to do when an injury occurs so people can go to get help and compensation. So that's the communications plan goal.

I'm going to pass the table over to Nami, and she'll walk us through formative research, and then we'll come back and start looking at an overview of the plan.

DR. SWAMY: Hello, everybody. The Altarum team has had the pleasure of working with Banyan and all of you in providing a research basis for the development of the communication strategy. And there have been multiple opportunities and I think multiple documents where we've taken you along with us as the formative research plan was developed and then implemented. And so I'm going to briefly just review what has been done just to remind you all how we've gotten to this point.

We used a multi-pronged approach for the formative research. We

conducted a literature review and environmental scan to better understand the target audiences. Who should we be focusing on? What are their trusted sources of information? Who are the key stakeholders? What key events may be occurring in the field that may influence or impact the development of a communication strategy? And also, what are the most effective communication strategies that we should consider.

With that information we also interviewed subject matter experts in the field. We had representation from the government, so folks from the CDC, also from advocacy groups, and also from academia. These are people that are very well informed about vaccines, about vaccine injury, about VICP, and also about communications strategies on topics such as this, very sensitive topics.

And so from that information we also conducted focus groups. And these are with the target audiences that based on the literature review and the environmental scans, and the subject matter experts, we decided that the biggest bang for our buck, so to speak, is really to focus in on those individuals that were being marketed to for vaccines. Who are those individuals that were encouraged to get vaccines? And those from the research that we conducted were parents of vaccine-aged children, expecting parents, older adults who are 50 year of age or older, and also health care providers, the individuals who actually administer the vaccines.

So what we did was we conducted six focus groups in two different cities. And we basically wanted to validate what we were learning from the

literature review and the subject matter experts and the environmental scan to better understand the target audiences, to understand what communication platforms they utilize, what trusted sources of information about the VICP do they utilize.

With that we have drawn some themes from the research. And we validated, we confirmed that there is limited knowledge and awareness of the VICP. The ACCV members have told us that many times and we're able now to say that the research does show that, that there is limited information about the VICP in the field.

Health care providers and consumers are the focus of vaccine related information and education. These are the individuals that the CDC actually encourages to learn more about vaccines. And so these are also the individuals that we should be targeting for more information about the VICP. In addition to that, we learn from consumers that they trust their health care providers the most. They are the primary source of information about vaccines and vaccines injury, vaccine related information.

One of the things that came out from our subject matter experts and the focus groups as well, is the level of information that's appropriate to be distributed to consumers versus health care providers. And also we have to keep in mind the type of consumer. So there's this challenge that we will have that the next contractor will have in developing effective communication messages is to determine -- to basically balance the content using appropriate

language or using the appropriate level of statistics so it will not deter individuals from getting vaccines, but also it won't encourage. So there needs to be a neutral tone; it needs to be informative, but neutral.

And that's basically speaking to the last bullet, as well. The health care providers versus the consumers, they had different perspectives about the timing of when the VICP messaging should be given. Should it be given at the time of the vaccination? Should it be given several doctors' appointments prior to, so that the individual can consider the information, and also the degree of information, the level of specificity and technicality of the vaccine injury itself and the VICP?

So there is a challenge that I think the next contractor will have in developing these materials. It's an exciting process, but it's also a very sensitive one. And so that is a theme that definitely came out from our research. And something that is an area for further research, Sally mentioned that the pretesting of the communication messages is going to be very important. So focus groups and potentially surveys of those consumers that we are trying to reach are going to be an important aspect of the entire process. In addition to developing rigorous methodology to assess whether the messaging is actually having the impact that we're expecting it to have.

So that's a very quick overview of the research. And if there are any questions about that, I'm more than happy to answer them during the Q&A session.

MS. HANSEN: So, Nami has talked to us a little bit about our target audiences. I'd like to go back and speak to that just a little bit more. The original mandate obviously clearly mentions the general public. But as you would imagine in today's world with the great proliferation of media, it's a different world. People today are really conditioned to getting messaging that's very specifically directed towards them. There's not a lot of tolerance for messages that just don't go quickly right to them, right what they need. And so it's not practical anymore to do a general public campaign, initiative communications outreach; it's just not practical.

So instead, in the VICP plan, we've recommended reaching out to those specific audience groups that Nami just mentioned. They have common characteristics. We looked for those who are most likely to be impacted by vaccinations, and those who impact those people about vaccinations. So as we continued to work on the plan, we actually started thinking and calling out these different audience groups as primary and secondary. The primary groups being those that we would actually reach out directly to, and those would be the conduit or the tool to get to these people as well. And that came to list the -- as you see on the slide behind me and that Nami just mentioned.

The first group is health care providers. They are that secondary audience. They are the number one source of information about vaccinations. Our target audience, we heard over and over again that they seek these people out for advice about vaccinations. We've looked at this group carefully. It's a big

broad group. It's not just physicians. We mean doctors and nurses and physician assistants and clinicians, community health centers, state and local health department, people who are involved with the urgent care facilities, home health care. So the list goes on and on and on, for example.

And now we're going to jump into the overview for just a second.

MS. DEVAL: I'm going to go back. Can I go back one second? If we could just go back to the slide, because of the difference in fonts between the PowerPoint that was created and the PowerPoint that's here, some of the text is being cut off. So it's parents, parents to be, older adults, Spanish-speaking adults, and below that is persons of low socioeconomic status. But I don't think you can see that on the screen.

So, when that happens, if we see it on another slide, we'll call it out because I think that's a pretty important fact.

Plan overview. Again, I'm going to go back to target audience for a moment, because the word secondary is a very difficult one to absorb. So just forgive me for one moment. Primary and secondary are marketing terms. It doesn't mean first or second, or most important or least important. Primary is the target audience that ultimately we want to reach and impact. Secondary audiences are those audiences we reach to impact the primary audience. So, secondary audiences being health care provider, I just want to make sure you know that doesn't mean that they're not important to us. It means that we're going to use them not only as a direct audience to educate them about VICP, but

also so that they can be ambassadors of the VICP message correctly, and appropriately, and effectively to the target audience.

So let's move on to plan overview. There are a couple of things to point out. The overall approach basically, as you can see on this slide, has four tiers. We're using these tiers as communication channels to reach the primary and secondary audiences. In this case they are health care providers, direct to consumer outreach, which I'll explain in a moment, partners, and then broadcast media. These have all been selected because they have either access to the target audience, they are trusted and have credibility with the target audience, or because they have a certain trust and access that we feel we can utilize in order to reach the target audience more effectively. And basically they may have resources that help what we do go further.

Health care providers, that's a very simple model in that we want to educate health care providers to reach the end user. That's very straightforward. Direct to consumer is a bit more complicated in that it really involves any channel of communication that speaks directly to the consumer. It's important in this model that we don't just go through health care providers to increase knowledge around VICP, because in fact we will have a situation where not all health care providers want to share information with their patients at a time in which we feel it might be most beneficial to do so. So we want to make sure that that messaging is available for those people in the target audience who want to seek it out.

Also, we go to partners. Partners are another influence of both

health care providers and the target audience, in that they can be nonprofit organizations, local health organizations, state organizations, other federal agencies -- the list can go on and on -- local community groups. Those people that currently reach this audience of people that we are trying to reach so that they can add their resources and then reach them for us.

We're also looking at broadcast media, and I think this section really needs some definition. Broadcast media can reach both health care providers and the general public. People still watch TV, for example, they still listen to the radio. Depending upon their demographic group it can be an effective tool. But I put a big caveat on this because we are not advocating an expensive national buy of any type of media, or a wave of media explosion that then cause some kind of backlash to people who might not want to get a vaccination.

Instead, what we're espousing is a very careful, very strategic, very planned, very carefully placed implementation of messaging, so that it appears in places in the media in which we know our target audience specifically exists. We don't want to cause a swell of information and then when the contract ends, the contractor disappears. We want to create a sustainable message that our partners and long-term assets we create can continue to perpetuate the message so it keeps going long after we're not here.

So when we say broadcast media, we're not talking about television and a large media buy. So just have that in your mind and we can discuss that

again later.

The plan is also consumer-based. And this is important. We're not trying to change the behavior of our target audience. If we know the audience doesn't watch TV, we're not going to put something on TV. If we know the target audience does listen to the radio, that's where we'll be. We want to be very careful and make this based on a plan where people do exist, instead of changing or making assumptions about people and saying we'll get them there. We won't get them there. We won't change them, and we won't change their behavior. We just want to make sure they have the information about VICP and then know what to do if an injury occurs.

A last call out on the plan overview is multimedia. We have very specifically not gone with a horizontally vertigrated plan. We don't just want to reach one channel of communication and hope that everyone will come and everyone will be there. We're trying to keep up to date with contemporary media, and contemporary media use patterns. So that means we're in various forms of media throughout, and I think you'll see that as we go through the plan, especially in the tactics section.

I did want to call out some key attributes of the plan, because they're very important as to why we developed the plan the way we did. The plan is accessible. Accessible means that if you are a member of the target audience we will have VICP audience, we will have VICP messages in places you frequent, so that when you seek out information about VICP you can get it

easily, you can get it quickly, and it's there for you. It is accessible. Accessibility also speaks to language. It's arguable that just being there and having a website isn't sufficient, that you really need to have a language that people understand so they know what to do with the information.

Responsiveness -- it's important nowadays that when someone does reach out for information that VICP is there. People have very short attention spans nowadays, but they've come to learn to ask questions. When those questions are asked, we need to develop media platforms in which VICP messaging exists so people understand it and know what to do.

Pragmatic -- I've mentioned this before. The plan is not trying to change people. I've seen many communications plans fail because they expect the messages to be so evocative and so compelling that people will just come, and that's not what we're trying to do. We're much more pragmatic about human behavior; we want to be where they audience is.

Empowering -- for health care providers we want to make sure they know they have all the information they need to present VICP messaging to their patients. Most of them that we spoke to are unaware about VICP; they're not aware it exists. When they did see materials about it, they had strong convictions about when the information should be shared and when it shouldn't be shared. We may not be able to change those opinions, but we do want to make sure that they know what VICP is and that they know where to find information and especially materials for their patients so that should that

opportunity arise, they know where to get that information.

Cost-effective -- this is a very important point. We have not developed a plan that is so expensive to produce that nothing will come of it. We understand the importance; we understand the clock is ticking. We've produced a plan that is scalable, so that if funding is not available for the entire plan, but only for a small part of it, it can be deconstructed without harming the strength of the plan, and that's a very important point.

Partners, for example, we want them to come on board to the extent they're willing and capable to do so. The plan should be scalable to allow people to come on board to that extent, and not only to the extent with which we are going to expect them to conform. The scalability is good for funding limitations, and it's also good for the humanity of people can only do so much nowadays and we want to make sure we give them to tools to do what they can do within the environment and the constraints they have to do it, and just be again more pragmatic.

Lastly, sustainable -- and this is a very important point, too. Notice they're all very important; I've noticed that. We want to develop messages that somebody else can carry. We don't want the contractor involved in this project or VICP to be the only people that can be the voice of VICP. So importantly we've created a plan that really provides for long-term meaningful partnerships so that those partners are empowered to continue the education around VICP. Also, creating long-term assets that are available through digital means and through

partners allows us to disappear. The contractor does not need to be here once the campaigns, once the efforts, once the work, once the materials, once the messages are out there we've designed this plan to carry itself and be sustainable.

We're going to look at the strategies now. And I apologize, it will be my voice for a little bit, so I'll try and speak deeply, and then loudly and softly and do whatever I can do so you don't get bored of it after a very long time. But there's a method to the madness.

What we want to do is talk to you a bit about the strategies. All of this process kicked off with a communications goal, and that was really the ball getting into the soccer game into play. It all started with that goal. From there we went through a very rigorous process of identifying objectives, which you see in the plan that we provided to you. The objectives were key because they really fine-tuned what we need to achieve. We then narrowed it down to six strategies, and we're not presenting the objectives today just for the sake of brevity and being able to provide you all of the information that's really important today. But we are going to explore strategies a bit, because they really set up the tactics very importantly.

To jump to tactics without strategies, we run the risk of not achieving the communications goal. We run the risk of going by hunch instead of by evidence. We run the risk of making mistakes. And in this situation, as in many, mistakes are not going to be possible. We want to be right when we get

right out of the door.

So I wanted to present to you a bit of those strategies because they give a really nice backbone to how we'll achieve the work. The first strategy is to educate, motivate, and empower health care providers to carry messages about VICP to their patients and to their peers. I would argue that motivate, educate, empower is probably the wrong order. We really need to education them first, and then motivate them to become involved. And then empower them with materials and messaging so they know how to talk to their patients about VICP and can ultimately make their own choice about when that happens.

The second strategy is to educate health care providers about VICP through credible organizations and key partners. We have some basic graphics on the screen only so that you can see the visual idea behind these strategies. Basically the key to reaching these health care providers is to reach those organizations and entities they trust. We've spoken with a number of physicians, pediatric nurses, and other members of health care providers to see what those entities are. They vary. Some people rely solely on online sources with maybe a membership organization or two, whereas others are conversely so.

So just like people in the general public, health care providers use media differently, and they use the assets available to them differently. So we have to acknowledge that and understand that as much in our outreach to health care providers as we do the general public. We also want to ensure we have

open communication to all of these health care providers, and that comes through these meaningful partnerships.

Our third strategy is to raise awareness among general audiences about VICP through online channels of communications. This speaks to allowing the conduit of messaging not to rely solely on health care providers. We don't want the onus to be on them. And we also found in our focus groups, the audience is surprisingly very interested in this information. They want to know that VICP exists. Many in the group said that they felt it was their right to know that VICP exists. There was a great range as to how active and interested those audience members were. Some relied almost solely on their health care provider for this information, whereas others were very inquisitive and were very active online. So we want to make sure in order to reach both of those types of personalities that we not only go through health care providers, but that we give the general public an outlet that they can reach out to when they want to ask questions and find out more.

We also want to do the same for health care providers. As I mentioned before, health care providers, there's a great range of health care providers, but they also used media differently. So we want to make sure that we provide information for them in a language, and a format, and a style that's really relevant to them on the VICP website. We'll explain more about that tactic later on, but certainly the strategy is that they have access to materials and information so they can more appropriately share VICP messaging.

Strategy five calls for individuals to be able to access information on VICP independently of their health care provider. This is very similar to the other point, but this is not only an online vehicle. This strategy really relates to personal communication, interpersonal communications with partners, community organizations, and other peers. Parents do talk to other parents, for example. We see a lot of that evidence in social media online. There are some active parent bloggers that do blog about vaccines and the need for vaccines. We need to be able to influence those voices so that we can affect peers.

Now, that being said, we're very cautious of social media -- very cautious -- and understand that sometimes just listening to the dialogue that parents have online is almost like a focus group that you don't conduct. It's very important to keep apace with what people are talking about, because people are talking about vaccination. They're not talking as much about some of the terms like vaccine injury, because they don't know yet that term really exists. It's not an intuitive search term.

So this is about exploring that. We're not recommending a tsunami-like entrance into social media to get conversations going with people online. We're not recommending that. Conversely so, we're recognizing the tool exists and are being very cautious about how to jump into that world.

The last strategy really speaks to what people don't know. As I mentioned earlier, a lot of people are not aware of vaccine injury. They're not aware that a possibility of an injury can exist. It's unlikely that they will ask

questions because they don't know to ask questions. If an injury were to occur to this group of people, it would be difficult to reach them were it not for their health care provider being able to reach them with messages. So, strategy six is about pushing messages towards the audience in a careful and targeted way that allows them to be aware that VICP exists. We're not relying on people coming to us to ask questions in this strategy. It's about that careful push of information that drives them to the VICP website, to partner groups, to local organizations they trust, or to other entities to ask questions.

MS. HANSEN: Sort of reaffirming what Sally is explaining to you regarding the messaging, if we were here together today to create a sort of typical commercial message, we would be after things that would help us stand aside from the clutter, that would wow people, that would engage them. And we would drive them that way, possibly, to get to the outcome we desire. This is different. We're about education. And we're also about avoiding these unintentional outcomes that we've sort of mentioned along the way, including the fact that we don't want messaging that risks leading an individual or a parent to avoid engaging in vaccinations. That's not our job. That's definitely not what we want to do.

So as we went through all of the research, we looked for themes and important comments, and we listened to health care providers, and we listened to parents, and older adults as well. And on the screen right now is a summary list of those message considerations that really resonated throughout

all of these different levels of research. I'd like to go through them just a little bit quickly, because when we hand this off what will happen is that the new contractor will understand these philosophically. They'll then turn these ideas into something very tangible, which as I think Sally and Nami talked about, will need to go back out into the field again for testing to make sure that the end result resonates and accomplishes what needs to happen with the target audience, again avoiding these unintended outcomes.

So at first, obviously, what we heard as you all have talked about even in these earlier sessions, people want simple, respectful, and easy to understand terminology. They want to hear things from their point of view. We call this user-centric. In today's world if you can accomplish a communications goal using phrases that are a part of the audience's world, you're going to have much greater sense of accomplishment, and it's going to be much more successful.

Again, the messages need to be very clear. We hear people say, well, if VICP is there to help, put that in the message. Is VICP a safety net? So those are even phrases that the next contactor would want to consider and test against. The other thing that was very important, they didn't want to hear old messages. Today's audiences get everything spot on, and it's current. Whatever changes and things, they need to have a long shelf life and not a phraseology that will be outdated in very short order.

They wanted us to be sure that language was based in fact.

Currently much of the information our target audience might be exposed to would come through the media and stories on the air. And sometimes those stories are inflated. They're there to gain listenership and viewership. They don't want that; they want facts. And as in all human nature, there's a group of the target audiences who want great detail, and then there are those that want top-line information. So it will be important to give all of these people access to alternate respected resources, thinking for example a link to CDC and other people involved in areas of vaccination.

They also mentioned, and we've noted that the VICP website should be updated. It needs to be simpler to grasp, easier to navigate. People, when they're on the Internet, they generally once they're in a website don't want to have to go more than two or maybe even three times to find what they need. So there needs to be an investigation of the current site and make it accommodate that.

Now, perhaps the most important comment that we heard consistently through everything that we did -- and if there's one thing that we've leave behind you -- is the need that people have to hear clear statistics about, you know, let this be my decision. How many people are injured by a vaccination? They want to know this, and they want to think about it and make the decision themselves. I have much greater appreciation for how difficult that might be from hearing the conversation you all had right before we started. That's a challenge. But I think we would all agree that's a challenge well worth

taking on and including in all of the messaging that comes as a result of the research that we've done in the new communications outreach, in the next phase of this.

Also the one final thing, they don't want to have a Coca-cola message. They don't want something that's branded and unexciting. Again, it goes back to that they want just facts.

So I think now we'll move on to tactics. I'll hand this back to Sally.

MS. DEVAL: Part of the screen did drop off behind us on that previous slide. It only said that all materials should be focus group tested before they're implemented. I just wanted to call your attention to that.

So general outreach tactics -- before we jump into general, I would like to say that the plan has basically divided tactics into four groups. Those groups are general outreach, which includes Spanish-speaking audiences, national audiences, and persons of low SES, provider outreach, which includes of course the health care providers, parents and parents to be, and then older adults.

There are two key considerations that we had in developing those four groupings. One was audience segmentation. And I think you've heard Merrell mention that before, and Nami as well. Messages, when you're delivering them to a national audience, can fall of the radar if they're not finetuned. If the consumer doesn't think the message is meant for them, they'll tune out and won't listen. Where this is most evident is the language, the words you

use, the colors, the visuals, the style of presentation, the format -- even where the messages are placed. It's very important that we, as closely as possible, narrowly define an audience. I would hope in future years down the road that we could get to a point where we are producing campaigns minutely for narrowly-targeted audiences. But for now we've got a long road ahead, and I think it's important to generalize to the extent that's sufficient to do so. That really fed the decision to make these groupings.

Number two was funding considerations. We had to assume that funding would be limited and that this wouldn't be a massive \$400 million dollar campaign. That's irresponsible. We produced a plan that would make it possible, practical, usable, realistic for VICP to implement. So that's also why these groupings were made.

So on general outreach, really the first step you'll see in all four of these categories is developing message points. In the process of working with the government what we're used to doing is developing all of our content at once, and then having it go through clearance. That's important because the clearance process can take a while, but also because from that point, after you've made those adjustments, when you get feedback from clearance, which is nine times out of ten very useful, you have approved content that you can apply then to all of your messages and materials. It makes the process more efficient. It makes it go as fast as it can go, but it also just makes it much more clear for everyone involved so we know what kind of content we have to work with.

Developing these message points comes first from the focus groups and the formative research that Nami's team has done. Like I said before and we've all reiterated, no messages are implemented into anything until we go through focus group testing and we find out did in fact this message resonate the way it was intended.

Another tactic we recommend is redesigning the VICP website. We really can't stress enough how important it is for the humanness of the site to be more evident to the user. We want to do this by making sure that the user sees themselves in the site and identify with the site, which is hard to do right now.

Visual images can help. Obviously we've put some on this

PowerPoint slide. We're not suggesting those are the images by any means.

But when a user approaches a website and can see themselves in the site, can see the language they use, can see images that resemble them, understand the colors and the layout, then they're more likely to engage on a deeper level with that site and then come back. So it's a very key component to invite the user into the site and not just the information.

We also want language to be more accessible, while walking the fine line, I know, of legal accuracy. There's a lot of science to what we're communicating, and we still have to be true to that science. That being said, we need to make the language accessible to people so they understand what we're trying to communicate. And it's important, or they won't leave with the right message, or they'll just leave.

Simply intuitive navigation -- many sites we've been to, as I'm sure you have, it's difficult to really figure out how to use the site, where to go. The trick is knowing from the home page where can I get that one piece of information I'm looking for. Usability studies help that. If you cannot find it quickly and easily, if you can't have a simply intuitive sense of where that information exists, the site fails in usability. We can't have that. We need VICP to be a site that people who come into the site can understand not just what's in front of them, but where to go to get what they're looking for.

It needs to have usable content. This means basically that the content not only is understandable, but it's practical for them to digest in their daily lives. It's wonderful on the page, but what do I do with it?

Also, and this is a key component, one-click translation to everything on the site turned into Spanish. The reason for this is obvious, accessibility and the target audience of Spanish-speaking adults needs to be accommodated and taken care of. What we're hoping for is a site that will accommodate many more languages down the road, because this is a very diverse country and we need to accommodate all of those languages and not set up a barrier. But immediately we would like the whole site to be translated into Spanish.

Lastly, search engine optimization -- SEO is how we refer to it, and typically it means that we are going to make it easier for you to find our site, so that if you do use a search engine -- and over 75 percent of people do -- we

should come up in the first three pages. It's most desirable to be on the first page. We're finding that users are dropping off much faster than they were just three years ago. So it's important through search engine optimization, and it has to do with meta tagging and there are tricks of the trades you can do constantly watching what search terms are used and how to drive up VICP's website earlier in the findings.

MS. HANSEN: What we're going to start doing is speaking a bit more quickly to get through the slides, recognizing your schedule. You can tell that we're so immersed in this we have more to share than --

MR. SCONYERS: We all did get the slides ahead of time.

MS. DEVAL: All right. So then we'll do this rapid fire. Partnership plan, I mentioned before the importance of that in order to have access to the target audience. It's creating meaningful partnerships. And there's a real science to doing that so that people both feel it's win-win and they're fully involved. In doing so, we also think we should have cultural materials, not just materials created in English and then translated into Spanish, but materials created for the target audience, whether it's low SES, Spanish-speaking, or any other audience, such as health care providers.

We do foresee a use and a need for basic materials such as fact sheets, people who at a glance want information quickly, booklets, people who want much more detailed information and much more rich information, and wallet cards, enabling people to drive them to the website URL.

Provider outreach, this is a very critical part. Developing message points, I won't go into that again; it's the same process as the developing message points before. We need a part of the website dedicated to health care providers so they know they can go there at a click and find the information they need that's in a language they're accustomed to hearing.

We want to build partnerships to assist in that message dissemination. There are clearly some key partners that can help us reach professionals in the medical field better and faster. We also want to put articles and ads in online and trade publications. I just want to say this is not paid media on TV. It is not a large buy at all. This is just very careful placement where we know health care providers read, where we know they turn, and sites they regularly go to.

Social media engagement and blogs is strictly defined to those areas online where providers exist. They would not be posted by the contractor on this project, but instead by influencers who are health care providers themselves who have a voice with people in that field. Again, it's a very careful relationship and meticulous planning.

We also want to offer a webinar through key partners. We've had success in this in the past and we know it's very effective. By having partners orchestrate the webinar, credible people who bring these voices together, we can show providers how to talk about VICP and show them how to access the materials on the VICP website.

Again, we've got some text cut off here, but just to summarize the online training, online training is a viable way to reach providers because it offers them accreditation, so it can get their attention. We don't feel that the content surrounding VICP is sufficient to warrant one full hour of training, but we do think that partners do exist that could also contribute to that content. We've named the Countermeasures Injury Compensation Program as one -- not the only one; we can consider more. But the point is at the end of that training, through some interactive questions and answers, through engagement as opposed to didactic learning and text-based information only, we can teach health care providers how to get more involved with VICP and how to know more about it.

Conferences are also a critical part of the strategy, because we can access the people we want to reach in the provider field. Also creating a speaker's bureau is important, because on the webinars, at partner event, at various events that become available to us, we need to have a positive, strong, credible voice that can speak about VICP in a way that people are open to and listen to, especially health care providers.

MS. HANSEN: So I think a good way to proceed in each of these target audiences there are some tools that are similar. Obviously they're going to be customized to that specific audience. So as we go through this now I'm going to call out some of the things that I think are a little unique in each one. For example, on the parent outreach I would underscore that I think this is one of the most -- other than health care providers -- a really, really important audience for

us. We're going to find great benefit through the use of social media with them. And they'll play a unique role to that. We would imagine -- and I don't know how much you can see this. Let's go down to the next page. We can see the benefit of a VICP blog, targeted blogger outreach to provide news and information. You've all heard of mommy blogs and blogs provided by BlogHer and Café Mom. These places exist and people are there. It's a good place to listen, tap into what people are thinking, and contribute when it makes sense with the educational messaging.

The other things that we've included unique to parents there would be the use of digital video. Digital video is a very successful tool for communication right now. It gives you great latitude in the use of podcasts, which can tap into people's mobile devices and whatnot.

And the rest of this, we would also just say that we would be using online media to deliver specific stories about this, too, so that people online could discover them and they could begin to be the voice and ambassadors for us on that.

Older outreach, the unique quality to older people still is that they are great in radio. We've planned great use in radio, PSAs. We also see that there could be good dialogue on news talk shows that we would target and get people into. That's one of the unique qualities of reaching older adults. And the rest of this, I do want to say older people now, if you look at Internet research even, the number of older people on the Internet is growing exponentially. We

can't leave this part out of it. We are there, we're there to stay, we love it, and it's a good place to reach and communicate with older people as well.

MS. DEVAL: I think that's it. I think we're on our last slide. Suffice it to say, the next steps would be the highlighted areas in green, which would be a new contract would be issued and the new contractor would then set about creating the materials, deciding upon the level of funding which materials would be created, which audiences would be targeted, and then moving forward through that process I described earlier.

MS. HANSEN: So now I think we're going to jump into the break that we talked about if you still want to do it. And I would pass this off to Charlene. Do you know how long you want to break, or do you not want to break? What's on your plate?

MS. HOIBERG: Just a ten minute, just stretch your legs.

MS. GALLAGHER: Okay. We will have a five to ten minute break. I'll encourage everyone to be back in five minutes, but if they can't make it for ten minutes, then we'll proceed. And this is in the way of a personal comfort break for everyone, and so everyone online if you could just hold with us, and you could do the same.

DR. FISHER: And if we have questions, we can go ahead and give them to them now?

MS. HANSEN: That would be terrific. We can take questions now, plus we'll be taking questions just as we talk together after the break.

DR. FISHER: Okay. And I'll be sure that the questions are read into the record before they're answered.

(Break)

## Agenda Item: ACCV Questions/Comments on Banyan Report

MS. GALLAGHER: And the question that I have for you, all of you, is -- you've outlined tactics, and there are always some budget considerations no matter where you are and who you're working with. I was wondering if you could prioritize for me what you think the top three most essential tactics would be. If in a perfect world we could do them all, we would. But given that it's not a perfect world, how would you rank the top three important tactics?

MS. HANSEN: From my point of view, I would say the number one tactic to fix is the website. That's by far and away the most important element that serves all of the communities, all of the audiences, and you'll get a great big bang for you buck for that improvement. Now on number two and three I have to pause for a minute and think a bit more. Do you have an immediate two or three?

MS. DEVAL: It's arguable that the webinar and the online training for providers is going to be really important. I think that they are the voice so much. I think Merrell said when we started that based on the research that we'd conducted, as well as general knowledge, people consult with their health care

provider on a regular basis. It goes across demographics, and it goes certainly across income levels. We need to make sure we have access to those providers as much as we can.

MS. HANSEN: So we imagined this initiative, so it called out several people groups. And the interesting thing about this is that it's not an event for the moment. This is information that needs to be sustainable over 25 lifetimes -- who knows? So the official way to get there is these people who are floating almost in front of a window of time -- I think in my mind it would be something towards parents, because if you would have talked to my parents, and then me as a parent along the way, and we would have started communicating this with other people, before a very long time this information would be spread out to the general population. So I'm not sure of the specific tactic off the top of my head, but I do think it would in my mind be parent directed.

MS. DEVAL: I also think that designing a new website, it's not enough to just design it and then they will come, because they don't come. So it wouldn't be responsible to create a new website and not have tactics online that drive people there. So, absolutely unquestioning, number one is the website. But one of those tactics also has to be about driving the audience to that website, so it could be the radio PSAs, which is effective with older adults -- not so with younger at all. But partner outreach we'd have to put in a big vote for, because partner outreach is what makes it sustainable. They can carry the messages on. They can put web links on their websites. They can speak about this to their

constituents. They can do email blasts, and it really is cost-effective.

MS. GALLAGHER: Okay. So can I summarize that number one would be website?

MS. DEVAL: And SEO right along with that, the search engine optimization right along with that.

MS. GALLAGHER: So website with SEO. Number two would be webinar, online training for providers, and number three, partner outreach to consumers? Parents?

MS. DEVAL: And I also just want to add that we're globally considering Spanish-speaking audiences. So when we say parents or parents to be, that includes Spanish-speaking parents and parents to be, with the necessity of culturally customized materials. So any partner outreach would be to reach consumers of both English and Spanish speaking.

DR. FISHER: I have a couple comments. I'm really glad that we shifted to that, because as I read over the actual document that you gave us, it looked like the Spanish-speaking we weren't getting to until the second wave, which I think would have been a real mistake, and love that fact that it's incorporated, because I think that's essential. And I think when you talked about a one-click translation, that doesn't go for me. I think you need your website to be available in a Spanish version so that your search is in Spanish, not you search in English and then you translate it to Spanish; that's not going to work.

MS. HANSEN: So if you've logged onto some websites where at

the very get-go they ask you for your language preference --

DR. FISHER: Which language? Yes, exactly. Like when you Google if you're out of the country, you know, you say what language do you want and then you put the language in, and then everything -- then there's no one-click translation; it's in your language so that you can get it. So I think that's an essential thing.

And my other thing is even more basic than that. I personally hate abbreviations, because I immediately tune out. So when you ask me do I know what VICP is, I don't have a clue what VICP is. But if you ask me what's the Vaccine Immunization Compensation Program, of course I know what it is. So I think you lose -- and I know it's the thing to do now; everybody abbreviates everything. Once something becomes a household word, maybe it's okay to abbreviate it. So everybody knows what USA means. But nobody knows what VICP means unless you've been devoted to it for the last year.

So, yes, you know what it means. But as soon as you start using those things -- or DVIC. Who knows what DVIC is and who cares? But if you tell me what it is you're talking about, then I can relate to it and I can really go with it. So I think the biggest current -- and this is just a general statement -- I think the biggest impediment to communication in 2010 is the use of letters instead of words.

DR. SWAMY: I just want to acknowledge that comment, because we actually did receive some feedback along those lines from the focus groups

that we had. You know, we were asking about have you ever heard of the Vaccine Injury Compensation Program or VICP, or the Division of Vaccine Injury Compensation or DVIC. And obviously the vast majority of individuals that we spoke with, whether they be health care providers or consumers, did not. And some of the comments that we received -- and we didn't actually include this in our report because it wasn't from the majority of the focus group participants, was that it does have a negative connotation. You know, Vaccine Injury Compensation is just too alarming, and it's more of a warning system. And so is there anyway that we could revisit the name of the program?

Now that is something that, again, we did not include that in the report. I'm just providing that feedback to you. And that's something that we should test further when we develop the messages.

MS. HOIBERG: I'd just like to thank Banyan and Altarum for your incredibly hard work and the ideas that you've presented here today have been amazing. And I feel like a lot of what you voice, you know, what you put in were things that we have been asking for. So it really did give me as a parent, I felt like I had a voice finally, so I'm very pleased with that.

That being said, I think that in order to move this forward I would love to hear specifically from our doctors here in the room just to give ideas to Banyan and then to hear from you, because I want to hear how you received it. How would you best receive information on the Vaccine Injury Compensation Program, and how would that encourage -- you know, what kind of information

would you get that would encourage you to share it with your patients? Honestly, the only reason that you would ever have to share it is if, unfortunately, if it happened, if they had an injury. So would it be something that you would just give to them at the time of vaccination, or would it be something that you would -- Meg, for example, how would you?

DR. FISHER: So, I think since I joined this committee now, whenever I give a talk on immunizations I routinely include information about the Vaccine Injury Compensation Program. It's part of my outlines that I give out every time I give a talk on vaccines.

Yesterday when I wasn't at the conference because I was giving a talk at a school health thing, and I included information about Vaccine Injury Compensation Program. So I think the idea of partnering with associations is a very good one. I think that the American Academy of Pediatrics certainly has a lot that we can offer in our training. We do a lot of continuing medical education that could include this information along with -- not solo -- but along with all of the other things. With every update of anything you would include this as part of it. So I think that idea of partnering is excellent.

I think the American Academy of Family Physicians is the other major group to partner with. And then I hope eventually you will get internists to start giving vaccines and will have to partner with them as well. I think that's a large group of physicians who aren't currently as engaged in the immunization process as I would like them to be. For the individual person in the office, Tom

and Tammy are much better people to really answer as to how we get it to them.

MS. TEMPFER: I guess all providers are mandated to give the VIS sheets with each vaccine. So I think that already happens. You're actually personally handing that parent information on the VICP also. I don't know because there's so much information there about the specific vaccines if then you want to say, you know, I hope you realize that there's also information on there if an injury were to happen, information is right there also on this VIS. I think that's already an important piece in place.

I don't know how you actually get the parents to read the VIS, because I've gone back in a room and they've been sitting on the table; they haven't even bothered to take them. But I think it's critical that we do give the VIS. The information is right there. Short of reading it to them, I don't know exactly how to get a parent to do that.

MS. HOIBERG: How did you yourself find out about the Vaccine Injury Compensation Program as a provider?

MS. TEMPFER: I mean I really found out about it -- I've never had an actual injury that I would have to actually look for the information. But after coming on the Commission, then it was very obvious to me that it was right on the VIS. The information is right there every time.

MS. HOIBERG: Okay. So you didn't know it until you -- you didn't really know about it --

MS. TEMPFER: I don't think most providers would until you

actually need it. It's kind of like a need-based thing. You know, God forbid, you don't need it. You know when you need to start looking for it where the information is.

DR. HERR: I would like to echo what the other two said. I think it's important that we provide some information. And everybody has their own way to do it. We, in our practice tend to -- people who read most about vaccines or read most about anything about their children are newborn moms, moms with newborns. Certainly there was the message of pregnant women, but I don't bump into those all the time unless they're already in my office. But when they first come we hand the a packet of all the information sheets, send them home with a cover letter, please read these and come to the next visit prepared to ask questions, and we can kind of go over them.

And after when we are going to give vaccines to the child, we go over the risks of what I expect to see. I don't specifically mention the injury program, but what I do say is if anything at all happens to your child over the next number of days, the next number of weeks that seems unusual, I want to know about it. And the fact that I'm aware of the program means that I can convey that information. And that's just one way to do it, but I wouldn't be afraid of the name of the program, because again it's a safety net. It's there to protect the kids who are unfortunate to be the small number that get injured by vaccines and whatever mechanism it is.

I do also echo the concern that we have for interns, because we

see more and more claims that are coming here by adults, by the elderly. And it's important that the internists are aware of the program, but we also have to recognize that most of these flu shots are not being given by their physician; they're being given elsewhere. So we're going to have to find some way to tag people who care for the elderly to get into this.

Now, this may be where your media program comes in to where you focus on adults who are then going to raise questions to their own doctor, who then is forced to turn to the DVIC website to get some more information about it so they can answer the questions when they come in. So it's going to be a different spur or stimulus than what we might see with family practitioners and pediatricians.

MS. HOIBERG: And I think that's the hard part about our program is how the vaccines are being administered at this point in time. The flu shot is literally handed out like candy. You can get it anywhere. I mean, I went to a mall in Atlanta, and they had literally these children sitting at the table, and I said where are your VIS? And they're like, my what? I said your Vaccine Information Sheets, where are they? You know, they're children; they don't know what they're doing. They didn't even have a cooler holding the -- there's no respect anymore for these vaccines. And it's no wonder we see so many injuries because of the vaccines, it's because of how they're handled.

And so if we're going to try and get -- those are the people that need it the most are those poor individuals that are going into the mall and go, oh

yeah, I don't want to get sick, I'm going to get a flu shot. Those are going to be the people mainly that are probably going to have a lot of the side effects because they're not administered correctly. They're poorly maintained. So, there has to be information out there on how to get help if you're injured. And the providers and the people that are giving out vaccines, if you're going in and you're going to be training people on how to administer these flu shots, then one of the very first things that need to be handed to them after how to do it is this is - you have got to give this information to these people because if something happens they have to call this number.

DR. SALMON: Perhaps this is answered by statute or by law, and if so Jeff can correct me or let me know and I'll apologize, but it seems to me one of the goals is to let every parent and everyone over 50 -- and now in fact because flu vaccine is recommended for all adults, it would be pretty much everybody. I mean, to make everyone aware of the program is an enormous task. And given the rarity of adverse events, I wonder if that's -- assuming resources are limited, it seems to me that it's the health care provider that's really most important. And I would say not just those that administer vaccines, because they should be giving out VISs and they should be reading then, you would presume. But certainly they need to know about the program.

But also specialists who may be treating people who would come in with a possible adverse reaction, for example, a neurologist, so that they know about the program, the know what to look for, and they know to refer people

appropriately. And it just seems like if you can target it so you're not trying to reach every American. And that's an enormous task, and there's so much information -- I mean, if I had a list of things that I'd like every American to know about, it would be a very long list.

And I wonder if this is really would make the top, but I think the providers, on the other hand, you could make a much more compelling argument for. I think you could target them much more effectively and much more efficiently, and presumably -- if it is an immediate reaction, then the person administering the vaccine would be the one to see that reaction. But if it's something with any delay, it might be -- it might not be the person administering the vaccine. It might be an ER, it might be a specialist, and having those people aware of the program and understand what it's there for and how it works, to me that just seems like it might be a much more effective way of reaching what I think your ultimate goal is, which is persons that are eligible for the program to be aware of it.

MS. HOIBERG: And I appreciate that, Dan, because that's something that I've said from the very beginning, that the doctors have got to know about the program, but first and foremost they have to know and acknowledge that vaccine injury happens. And they have to realize that, you know, how do they recognize vaccine injury. But then of course, unfortunately that's not our job. We're the end of the line. This is where you come once you've experienced an injury, and we're the program that hopefully helps you to

get back on your feet.

So most definitely if I had to choose one thing it would be educating the providers and go from there, because if your doctor doesn't know about it, forget it. There's not a chance.

MS. HANSEN: Could I ask you one question back on that? So what does your mind tell you when, say, we were sharing with you some of the comments we got from health care providers who were so reluctant to pass this information on to anybody?

MS. BUCK: I'd kind of like to make a comment along those lines. There is a problem with that. It's something to think about. And that is it's not an immediate reaction and it's one that may have a delay, like in our situation a week later trying to figure out what was wrong with our daughter. I think it's at that time that somebody who's assisting, whether it's the doctor, or support staff from the hospital, or somebody should at some point share with you that there is this program. And that piece was missing.

And partly it was because the general reaction to what had happened to my daughter initially was it's not related to the vaccines, and we'll figure out what's making her sick and make it better. And it took quite a long time before the treating physicians really came around to the idea that she was a vaccine injury. But the problem is, with the clock on the programs so short, the three-year statute of limitations for filing a claim, that even if a child comes into an emergency room with a problem and the parent just says they were just

recently vaccinated, could it be the vaccine? I think at that point in time somebody needs to tell me about the program just so that they are collecting their paperwork and keeping their records straight and understanding that this is something they may want to consider down the road, if it does in fact turn out to be a vaccine injury. And hopefully it isn't.

But that is a period of disconnect right there. And I'm not sure what the answer is to fixing it. But I do think we need to acknowledge that there's -- it seems like providers may be afraid to tell you about the program because then it may make it appear that think that it's a vaccine injury and they're not even sure of that at that point.

MS. DEVAL: I think we also got a sense from the groups that we had that the physicians we spoke with were very reticent to share any information with their patients for fear that the patients would decide not to be vaccinated. So I think in answer to your question, because it was a really good one, about maybe we should just reach physicians, is that because the mandate requires that the general public know about VICP that I think that there are some barriers that we won't be able to overcome if we just go to health care providers. But to your point we can't go to everybody and we have to start somewhere. So to allow information to those people who are actively seeking information, the groups we spoke with were so vocal about: I would look this up, I didn't know this existed, I would want to know, this wouldn't deter me from vaccination, this feels like a safety net, this is a good thing as long as I know it doesn't happen

often, I really like knowing this, that there is a voice, there's a place where we can go through the website and other tools to reach them without watering it down so much we're not effectively reaching anyone. I agree with you, reach health care providers first and foremost, educate them about how and when, but then also provide a platform for those in the public who do want to know to find out.

DR. SALMON: I didn't mean to suggest at all that the information shouldn't be available to the public or withheld from the public. That was not at all my suggestion. But rather, if limited resources are going to be used to target information, 300,000,000 people is an awful lot to reach. And I'm not sure how many providers there are in the country. Maybe others know those statistics, but it's a lot smaller. That was really my point.

MS. GALLAGHER: During your focus groups did the VIS get discussed. Despite what happened at the mall, Sarah, it's actually mandated that those be given out, so that had to have been a violation if it's as you described it. But since it's mandated that they be handed out, did you hear any reactions about: had parents ever read them? Had they actually noticed anything? Is that an issue? It seems if most people follow the law, and I have to assume they do, that some information about the program will have already been shared with them.

DR. SWAMY: We did. We actually handed the VIS out and it was a matter of getting their reaction to it. And people acknowledge receiving it

sometimes; they recall sometimes. But at the same time they thought the information that was included in the statement was just so much that it just overwhelmed them. And they didn't realize what that phone number that's given, what it really means, what the purpose of it is.

And so it was inconsistent actually about the feedback that we received from the consumers about whether they actually received the VIS or not. They didn't necessarily recall. And when it was handed to them, those who did remember, it was just a matter of it was just handed to them. There was no introduction of the document or anything like that to understand what it contained and that they should be encouraged to read it.

MS. GALLAGHER: And my pediatrician was maybe just one of the great ones. But it was always handed to me at the beginning of the visit and I was encouraged to read it. And then I took my child into the room, we got undressed and stuff, but I had a period of time, and being the compulsive person I am, I did read it. But that's what I remember, because each time I went in they handed me the papers and encouraged me to read it. But I'm not saying all parents will read it.

DR. SWAMY: It's very inconsistent, the feedback that we received. So in order to make -- I know that it is a requirement for the VIS to be distributed, but it's a matter of how and when it's actually distributed during the doctor's appointment.

MS. HOIBERG: Can you speak to the reaction of the doctors of

when they were informed of -- when they actually read the risks of the vaccine and how their reaction differed from those of the parents?

DR. SWAMY: About any particular -- just generally? Well, physicians, I think they understand the statistics behind vaccines a little bit easier than consumers, and so they didn't actually have an issue with the risks that are associated with vaccines. I'm not exactly sure if I'm answering the question.

MS. DEVAL: We were surprised by the groups in terms of the difference between the physician's expectations about how the general public would respond and the general public's actual response. The general public wanted to see these materials. They didn't say it would dissuade them from vaccination. They did want to know how often this occurs; that was critical.

Physicians, to Nami's point, knew how rare this occurred. One physician said, well, I've been doing this for 20 years and I can't recall it's happened maybe once. So they have that sense and that context of the rarity, and I think that may have impacted their responses. What they did respond to was any literature that explained injury or death can occur, the exclaimed, death - I'm not giving this to my patients. There's no way I would give this to my patients. There was a very emphatic sense of I'm not going to give this to my patients. If an injury occurs, I will provide this information. It's good to know where the information is so I can do that. But I'm not going to talk about it before. And I'm speaking generally; not everybody said that. And some of the responses differed, but generally speaking would you agree?

DR. SALMON: I wonder if that in some ways doesn't -- it kind of gets to the point I was making, although not directly. But is it necessary for a doctor to tell every parent verbally about the program if it is so rare that there's an eligible child? Now I mean they are telling them by giving then the VIS, if in fact they're following the law and giving it, because it's on the VIS.

But it just seems to me, I mean regardless of whether or not the clinician or clinicians who said that are right, what seems to me is much more important, rather than telling everybody verbally -- because think about how much information a clinician needs to share with a parent. That time is short, and if the vast majority -- if in this case it's one patient out of 20 years, then the missed opportunity to talk about things like child safety and obesity and nutrition and many other topics is missed.

But it seems to me, again, what matters is when the child comes in with something that could possibly maybe be, that's when the conversation seems really warranted, and then again you're targeting it, you're saving your limited resources. So that's just food for thought. I'm not trying to dissuade where you're going.

MS. HOIBERG: I totally agree with you, Dan, in that matter. I mean, I don't think that -- in our family's case I was one of those moms like Charlene that I read everything and I was like, "Oh, my God, seizures!" And he said, "Oh, in my 35 years I've never seen a case." And that was with my first child. So with my second child I didn't even give it a thought and just went on

right about it.

And luckily in our case, Kate's doctor was very, very adamant about getting -- he called in the VAERS report, he did everything he was supposed to do, but he didn't tell me about the Vaccine Injury Compensation Program. He filed a VAERS, but he didn't tell me. The person that told me about it was her neurologist, and that was because I guess he had seen a case previously of what had happened.

But like Tawny was saying, it took them 20 days to even come -even after I said -- and I even had the VIS in my purse, in her diaper bag and
handing them to the doctor going, "She just had them, and you're saying she's
having seizures, but it says right here that she could have seizures." And they
don't listen. They don't listen. They treated me as if I was this crazy mom. They
gave her all of these drugs that in the end -- at one point I totally believe that
even with her receiving encephalopathy because of the DTaP that the overkill of
drugs that they pushed into her system fried her brain even further than what it
already was. So, if they had known maybe this is a reaction, would they have
treated it differently? As doctors, would you have treated it differently, or would
you have continued to go on and treat it as, you know -- I mean they treated her
from everything from cat scratch fever to mad cow disease, for herpes -- I mean
everything. So if you had thought, okay, well maybe this possibly is a case of
vaccine injury, would you treat it differently?

DR. HERR: A little bit of a comment on that, in the sense that we

all know that simply because of the cases that come before us and before the courts, trying to prove vaccine injury is very difficult. Now, the idea of when your child comes in and has symptoms that may be compatible with vaccine injury, there's a whole bunch of other things that are not, and are treatable, and can be cured. And so vaccine injury in many ways is what they call diagnosis of exclusion, where you show them it's not everything else that you can do something about, then you're going to come to the idea, okay, it may be the vaccine. So it's always got to be in the back of your mind, but to be honest I would say that probably everybody who you would ask that question to, would you do everything again, they would say yes, because any one of those things may have worked.

MS. GALLAGHER: But coming back to sort of the subject at hand, so you had a VIS in your hand that talked about the compensation system, and yet you didn't notice it?

MS. HOIBERG: I was back in 2000 -- I knew in the back of my head there was something, but I didn't -- you know what I mean? It was like I think there's something with the government. I think I can sue the government or something, it was like you know -- but I wanted help for my kid, but -- no. And then the neurologist told us about it. But at that point it was --

MS. GALLAGHER: Okay. So the information did come to you?

MS. HOIBERG: The information did come to me, yes, through her neurologist.

MS. GALLAGHER: I guess what we're struggling with is how do we make sure that the information is there just in time? When there are no injuries, whether or not you got the information probably isn't as relevant, but the just in time is very relevant.

MR. SCONYERS: I want to go back to one of your very early slides, your major research themes and considerations and note that you said health care providers are the primary source of information to consumers about vaccines, vaccine-related information, including injuries.

Then you went on to say something that I think is just wrong. You said that you were targeting audiences who are affected by vaccinations. And I think this conversation is demonstrating that's just the wrong focus. The focus needs to be on people who are affected by vaccine related injuries, or who may be affected by vaccine related injuries, and providing general information about the moon, the sun, the tides, and the possibility of vaccine injury is irrelevant to most people, to the vast majority of people who receive vaccinations.

What needs to happen is that providers need to understand and recognize the symptoms of potential vaccine injuries and know what to do about it and how to advise their patients and their families. So, however good our providers are at recognizing as part of their differential diagnosis the potential for a vaccine injury, they don't know squat about the program, except for Dr. Fisher, and Dr. Herr., and probably three or four others in the countries -- maybe a dozen. But they don't know anything about this. And they need to know at the

moment they have incorporated vaccine injury into their differential diagnosis to advise the parents how to access information about it.

Now, your point about the website is very well taken. That's the time to direct people to the website. Nobody is going to go to the freaking website ahead of time. The place for information on vaccines and contraindications to vaccines, and potential injuries associated with that, that's on the CDC's website. There's a rich wealth of information out there about vaccines and who should get them, and what may happen as a result of them.

That's not this program. That's somebody else's program. This program is, okay, so now you have to incorporate into your thinking the potential that there has been a vaccine injury. What do you do about that? So that's the first thing I want to say.

The second is --

MS. DEVAL: Can we acknowledge that for a second, because I don't want it to be forgotten. It's a very good point.

MR. SCONYERS: I don't think it will be forgotten.

MS. DEVAL: No, I don't think it will either. But I think it's a very good point, and in fact we went back and forth time and time again in the creating of the plan to that essence, that very, very point.

MR. SCONYERS: Well, your plan doesn't show it I think. Your plan I think was misguided to a general audience, not to a very specific audience.

And I think you are doing the wrong -- you have presented what to me is a pretty

simplistic and generic plan for generalized outreach to generally educate the universe at large. And I just don't think that's -- you haven't focused and targeted your recommendations to really accomplishing what needs to be accomplished in order to enhance the effectiveness of this program. So if you want to go on from there.

The other thing that I want to say is I didn't get the sense that you appreciate the realities in which this program operates. So when you're talking about blogging or Twitter feeds, as we experience this program at these meetings, our friends from the program are simply unable to talk about specific cases. It's in the nature of the program that they can't. They can't respond in any kind of public way to any particular case that's presented to them.

So if there's a Facebook page out there -- and I have some experience from my hospital about having a Facebook page -- people will put something up on the Facebook page that says this is what happened to me. Well, okay, that's sort of useful to us, but we never respond on the page. And these guys will never respond on the page. They will not be able to send out Twitter messages that are in any way very specific. So I felt like you got to the point in your generic plan that called for social media, and you kind of plugged in social media to that. And I wrote as I was going through your slides this was the buzzword bingo portion of the slides. I thought, okay, we've got to mention Facebook, Twitter, and YouTube. But it just doesn't seem like you've really thought through how to get the message to the people who need it, who are the

people who are providing vaccinations and then following up with their patients, so internists, pediatricians, family practitioners primarily.

That's, Sarah, taking into account your point that a lot of vaccinations are delivered outside of the primary care setting. It's the primary care providers who have to know how to recognize -- they have to understand there are patients who receive vaccination then need to know how to recognize the potential for injury.

That's where I think the communication plan needs to be targeted.

And anything else to general public or people receiving vaccinations is really tertiary importance -- not even secondary.

MS. HANSEN: I find your feedback really very helpful. AS we went through this -- and Sally's trying to say the directive for us is to fulfill this sort of legislative mandate, which is to inform the general public.

MR. SCONYERS: It says reasonably. I think the measure is what's a reasonable effort? It's not -- you don't have a mandate, the program doesn't have a mandate to inform the general public at all costs. It has a mandate to undertake reasonable efforts. And the question is what's a reasonable effort in the context of this program, in the context of current financial realities?

MS. HANSEN: I think you bring up very good points.

DR. FISHER: I don't know, I think to me we've sort of flipped the whole way too far the other way. So I think it is the mandate to inform the

general public. So, I agree, and I think you started your whole thing by saying we can't inform the general public, so these are the groups we're going to target.

But I don't think we should throw away the general public and say we just have to do health care providers, because if you don't get to the right health care provider, you're stuck.

So I think there's got to be some balance between the two. And so I would disagree with Jeff that we can't do anything to the general public; I think we can. So, for instance, the brochure that's available, that could be available -- first I have to admit before this I didn't know there was such a brochure. So that could be available in pediatricians, in internal medicine, at your local pharmacy. Those things could be available to the general public. Not everybody is going to use them, but at least someone has then seen it, and maybe it clicks a bell when you get to the point that you have an injury, either yourself or your child.

The fact that it's now very clearly on the Vaccine Information

Statements I think is a very important step in the right direction. And the idea of a little card that's got the website on it for people who think that they might be injured, I think that information, that banner, that whatever, could be a public service announcement, or could be something that could be used for the general population on the chance that maybe it will hit the right person one time out of a hundred.

So I'm not quite ready to give up the general public. And Dan said the same thing. I'm just not there. I do think it is our obligation to try to get to the

general public.

DR. SALMON: If I could just respond to that, it's not that I don't --maybe I should have been clearer in how I spoke. It's not that I don't think any
effort should be made. And I think, of course, having a good website and having
information available is a good idea. That's not what I intended. But rather,
when you're talking about targeting and focusing limited resources, that was the
point that I was trying to make. So I agree with what you said, Meg. And there
are a lot of people that are uninsured and there are people that don't have
access to medical care. And so I agree with your point. I should have been
more careful in my speech.

MS. HANSEN: Ironically in some of those other audiences outside of healthcare providers are actually conduits to the health care providers, too, to get them to be more proactive about delivering the messages at the right time, with the right information. So there's a marketing term that's called a social ecological model that's used. The point of it is that to accomplish something, it's very hard to get it done by just taking one approach. But if you hit different levels of a community, of a society, of a people type, you can be ten times more effective. And the model that we put in front sort of captures that.

MS. BUCK: I wanted to make more comments, because I'm not sure how much longer this is going to last. It seems like a lot of this discussion is obviously based on the assumption of a limited budget. And I'm always a little bit bothered by that, because I think if we look at the kinds of money that is spent --

one of my thoughts last winter during the H1N1 crisis was that so much money was spent to message the information about getting the vaccines -- an enormous amount of money was spent doing that. And it seemed to be a very good opportunity to have a fairly high impact. The target for that vaccine was pretty much everybody, that informed the public about the immunization programs. So I think if it doesn't become a priority expenditure out of the enormous that's spent on communicating everything else about vaccines, then we'll always be sitting here having these discussions about how do you get the VISs out to people, and how do you communicate about something so important with no funds. And I think that's one of the major rubs here.

MS. GALLAGHER: Tawny, I'm not so sure that we're going to be in a position of no funds. And that might be a discussion for another day. I brought up if you did have limited funding which way would you go. And so I apologize if I implied that I knew anything about what our funding would be.

MS. BUCK: My comment wasn't directed to that. In fact, I got disconnected during some of the conversation and comments. It was just more of a general comment about how we've at this point spent a lot of money on what, I agree with Jeff, is a fairly generic communications strategy. And the program has been out for a long time.

MS. GALLAGHER: And I'm sure we're going to have a number of communication and outreach working group meetings following this meeting. I think there are so many levels to this communication and outreach that it's hard

to come to a firm conclusion right away. But I really appreciate your comments and your pointing out the importance of the message. And I think we'll have to struggle with how we would like to make recommendations as a Commission for how that goes out.

And I do look forward to a lot of work with the communications and outreach working group. And I'm hoping that Annie will help me set up some teleconferences so we can deal with it more in depth over the next couple of months. Unfortunately we're not having another meeting until March, so I don't want to wait that long. And that's why I think that the workgroup should keep working on it. We should keep getting input from the Commission members who aren't part of the workgroup, and try to get more concrete ideas on where the Commission stands on the various issues. And I appreciate the complexity of it all. I appreciate all of the work that Banyan has put into this very, very complex communication problem.

But I think that we will find very good ways forward. And I think we will find some budget. So I think that we are going forward in the right way. I think we should continue to just get to the crux of what's important. I appreciate Jeff's comments on his vision of how it would go. And also Meg Fisher and Tom, who have a more concrete view of how the world works when it comes to administering vaccinations and seeing kids who have injuries.

But I think this was a very useful discussion this morning, and I'm sure it will continue. At this point, I'm wondering if there are any more question,

comment? Go ahead.

MS. TEMPFER: I just had question before we move on. You talk about educating health care providers, you know with webinar and the podcast, which I think actually is an excellent way to do it. Do you envision like attaching CEs to it? I think that's a real draw for health care providers. And how would you go about doing that, which websites? That's what's always kind of -- as a provider you go on the web and you're looking for those kind of things. I go to Medscape. I know there are different education sites there, and that would be -- how do you envision actually attracting people to that?

MS. DEVAL: Much of the accreditation we've established has been through CDC, so they give accredited CMEs or CEUs or whatever it is that's required. They get their accreditation through ADA I understand. And so what I think happens is we can provide that and bring the CDC to the table because any body, any training, any entity can go through CDC accreditation, but the first step would be to explore what kind of accreditation we'd need, and then establish what king of body would provide that accreditation for us. So it would be explorative, but in terms of would we have it, yes, absolutely we would.

MS. HANSEN: And in fact, we feel really strongly about that because it is a way to convince health care providers to capture that education because their schedules are so demanding and whatnot, to weigh those additional sort of incentives in front of them can make a significant difference.

MR. SCONYERS: I want to point out two other things, or one other

thing, but it appears twice in here that I noted. And this is towards the end of your slides. You have some slides on parent outreach, and one slide starts "right media banner ads." And you say it's important to infuse online space with positive, visible, and supportive messages about VICP. That doesn't sound objective to me. And then under older adult outreach you have under social media outreach, you again say place positive VICP messages. And again you spend some time talking about how objective you want to be, and that doesn't sound objective. A fair amount of what we hear here at these meetings has to do with some of the less than positive attributes that petitioners experience through the program. So I'm pretty sure you don't mean it that way, but it does come across that way.

MS. GALLAGHER: Are there any others? All right, now we're going to take a break for lunch. So we'll return at 1:15, and I'll put the phone on mute right now. Thank you.

(Whereupon a luncheon recess was taken at 12:30 p.m.)

## AFTERNOON SESSION

Agenda Item: Report from the Division of Vaccine Injury Compensation.

MS. GALLAGHER: Let's continue our agenda. And next up is a report from the Division of Vaccine Injury Compensation, which will be given by Dr. Evans.

DR. EVANS: Good afternoon. In your blue folders you will have on the right side the presentations for this afternoon, including my updated, an update from Mark Rogers from the Department of Justice, and then the other agenda items, the adjuvant discussion by Mark Walderhaug from FDA, and Dr. Vito Caserta on rotavirus vaccines, and safety updates from Dr. Jane Gidudu and the NIH update from Jessica Bernstein from NIH. There are also a couple of additional items, an Washington Post editorial in the past week having to do with the Bruesewitz case, and there are a couple of article also that have been put in there related to the updates by Dr. Gidudu and Ms. Bernstein.

So with that, let's go ahead and proceed. I'm going to start with the filings through fiscal year 2010, slightly into 2011. You'll see remarkably that fiscal year 2010 for non-autism ended up with a total of 429 filings, which actually is the most -- even exceeds the year in 1999 when we had the bolus of the hepatitis B claims going back eight years. It even exceeded that number, which was 410 I believe. So this actually was the most vaccines we had received going

back to the filing deadlines in the early 90s. So there was quite a dramatic increase in activity for that portion of the program, and we have no reason to believe it won't continue as more and more people become aware of the programs. And again, what is driving this, as was demonstrated by Chief Special Master Lord's slides that she presented at judicial conference yesterday that flu vaccine is the predominant vaccine, and adults now figure more than half of the claimants that are filing with the program. Autism vaccines have dropped to 18 versus 109 the previous year, and so on.

In terms of adjudications, there's really nothing remarkable here, otherwise that there's still a significant case of adjudications, which I will break down in the next slide. But the one case that was compensated that we spoke about at the September meeting, which was posted on the website following the meeting.

And in terms of the breakdown of adjudications, I think the trends are fairly consistent. You'll see that the concessions may have increased in terms of percentage, some slight changes as fewer cases were defended.

Settlements still are 80 percent or above. And that continues to be the trend.

And I think that the compensation rates that were reflected in the discussion on data yesterday in court or something they were 60, 65, 70 percent over the last several fiscal years. So a very brisk pace of claims being compensated, mostly through the settlement process.

In terms of petitioner's awards, fiscal year 2010 was also

remarkable that \$189 million dollars plus was awarded. There were several claims that were quite costly in terms of the final adjudication. And I think I reported the top ten outlays for claims over the course of the program, about three or four of them occurred during the last fiscal year. There are various reasons for that, but clearly there's a trend towards some of these claims coming to compensation that are in the \$10, \$15, \$20 million dollar range. And as a reminder this pays for a lifetime stream of benefits in the form of an annuity in addition to the other elements of compensation that are provided.

The balance from the trust fund is really, it's only one month since the previous meeting in terms of data. I would remark that because of the significant outlays the trust fund is not growing nearly as much as it was before. The net balance is below \$100 million, but still growing but much more modestly.

MS. HOIBERG: And Geoff, I have to say I approve.

DR. EVANS: Okay. As noted from Ms. Hoiberg. And in terms of significant activities just within the past month, it turns out that they're most related to me. First of all, Magda and I attended the National Vaccine Advisory Committee meeting in Washington. The highlight of that meeting was the Secretary's presentation on the Health Care Affordability Act. And we also had some reports from the safety workgroups that Dan Salmon may be bringing us up to date on. And both Magda and I updated the committee on program activities, as well as the Commission.

Later that month I attended a one-day conference entitled The

Science, Ethics, and Politics of Vaccine Mandates. This was organized by the Penn Center of Bioethics. It took place at Children's Hospital of Philadelphia. And the agenda included presentations and panel discussions on school vaccination requirements. A lot centered on mandatory flu vaccination for health care workers. Dan Salmon was one of the speakers, I should add. The history of vaccine mandates and other topics, and speakers were represented from federal, state and local public health agencies, the pharmaceutical industry, clinical medicine and academia. I thought it was a very interesting day spent, and a lot of good questions back and forth, a lot of good discussion interfaced.

And at the beginning of this month I attended the annual meeting of the American Academy of Pediatrics, which was held in San Francisco. And it turned out that the Department of Justice sent a couple of folks and had a booth with a program there. And I stopped by and what they reported to me at the time was that a lot of pediatricians had stopped by, had awareness of the program, which has been borne out by surveys of fellows of the American Academy of Pediatrics over the years, so that's not such a surprise, but it's always good to keep reminding folks of the presence of the program and some of them were questioning about H1N1 vaccine and whether that was going to be covered by the program. Which of course, the answer is yes, because that's now going to be in this year's vaccine.

On October 12<sup>th</sup> some of us from the Office of General Counsel and our office attended the Bruesewitz hearing at the Supreme Court, another

hallmark occasion for the program. We've actually -- this is the second case that was heard by the Supreme Court over the 22-year history of the program. And a decision is expected anywhere from a few months from now to maybe as late as June; we just don't know.

And I also understand that some in this room also had the privilege of attending a reception at the Supreme Court last night, and I heard a lot of very good things about that. So this program always has its little surprises and twists and turns in terms of opportunities.

And finally, I gave an overview of the Vaccine Injury Compensation Program to graduate students in the department of immunology at Children's Hospital of Philadelphia. And this is a vaccine and immune therapeutics class, which goes over a whole series of science and public policy issues related to vaccines.

So for those in the listening audience, the points of contact, if you wish to get in touch with the program, you can write the National Vaccine Injury Compensation Program, and the address is 5600 Fishers Lane and that's in the Parklawn Building, in room 11C-26, Rockville, Maryland 20857. The telephone is 1-800-338-2382, and the Internet address is <a href="https://www.hrsa.gov/vaccinecompensation">www.hrsa.gov/vaccinecompensation</a>. And the contact person to write would be Ms. Andrea Herzog at the address that I just mentioned a minute ago. And her direct phone number is 301-443-6635, and her email address is <a href="mailto:aherzog@hrsa.gov">aherzog@hrsa.gov</a>.

And that will end my presentation. I'm happy to answer any questions. Thank you.

MR. SCONYERS: I was looking through the statistics you gave us ahead of time under Tab 4, and specifically the vaccines listed in claims as reported by petitioners. You did give us that chart didn't you?

DR. EVANS: Yes.

MR. SCONYERS: And I apologize, I can never remember if I've asked these questions before.

DR. EVANS: I can promise you that you probably have, but that's okay.

MR. SCONYERS: I look on here, and under OPV it looks like there's one unresolved OPV claim. I just thought that it had been long enough. I was just a little surprised to see that.

DR. EVANS: Jeff, to be honest, my understanding is they all have been adjudicated. I will get back to you and let the Commission know that.

That's a very easy question. And in terms of IPV, this has been actually one of the good stories, is that the IPV claims, for example, were mostly from the 50s and 60s and really as the 70s, 80s, into the 90s it trailed off completely -- there were none. And then as we went to the sequential schedule and then the full IPV schedule, we do have a very small number there. But OPV as far as I know has all been adjudicated.

MS. GALLAGHER: Any other questions? Thank you very much,

Geoff. I would like to move on to the report from the Department of Justice, and Mr. Mark Rogers will be presenting that for us.

## Agenda Item: Report from the Department of Justice

MR. ROGERS: Good afternoon. It's nice to be here. And I think I can be similarly brief. We've had only two months since the last meeting. And as you know I give you a snapshot of what the litigation picture has been since our last meeting. So it's a very recent, very real-time picture of what's going on in the program.

First, we had two new paralegals hired. They are replacements. That gets us up to seven, and we're looking for our eighth. Total petitions filed, there was one autism petition and 78 non-autism petitions. And has been said here both today and for those of you who attended the Court of Federal Claims conference, everybody seeing it, looking at the same data, the number of petitions being filed are going up. If you multiply this figure out over the two-month period, it would be 468 petitions filed annually. So the numbers are going up. They are non-autism cases, and primarily adult cases.

Here are the adjudications, and again we pick this up from judgments as they come through our hands, which is the first place them come. We hold on to them until they're ready for payment, and then we send them over to HHS, and that's when they start to pick up the numbers for their statistical purposes. You'll see we have 33 compensated cases. Of those, two were

conceded by HHS. And of those cases, one was resolved by proffer, and the other by stipulation.

And we've talked about the difference between the two. A proffer is when the parties agree as to what the evidence shows. Usually it's just one life care planner. And a stipulation is when the parties have their different positions, but they talk about it and then shake hands on a compromise of some sort or another.

Of the cases not conceded by HHS, one was a decision rewarding damages, one was a proffer -- these are compensated cases that weren't conceded -- and 29 were resolved by stipulation. So you'll see the vast majority requires a stipulation. I say that means that there were honest differences of opinion that had to be compromised. That's the usual case. And we had 68 that were not compensated. Of those, 12 were non-autism petitions -- and I know just as an interesting side note, of the 12 dismissals, four were based on a request by the petitioner. They do that for a variety of reasons. But they weren't involuntary; they were requested. And the others were autism dismissals. And some of those -- I don't have the figure -- but some of those were voluntary as well.

These are all voluntary. This is under the Act's provision for a withdrawal. The petitioner has a right under the Act to withdraw a petition if there hasn't been a decision within a certain amount of time. And that amount of time varies according to some different circumstances. But that's unusual; it's

unusual for a petitioner to pull out before one of the resolutions that we had on the previous page.

We have the definitions for your efforts, what we mean by what we say. Again our chart, and I know I sound like a broken record. The cases get resolved down the left side of this chart down into that pink box. And that is a final decision awarding compensation based upon a settlement. That is the most common path to compensation under this program at this time. And for those of you that attended the conference with the Office of Special Masters, the Court of Federal Claims, a lot was said about how we'd gotten to this point and whether it's a good or bad thing. We think it's a good thing. It'd be interesting to go back and see, and talk to the framers of the Act and ask them if this is what they intended, but this is how it's worked out.

The autism cases -- and we're pretty close to pulling theses slides off of our presentation because they're not going to change. The Theory One cases have been resolved. Again, for those of you who were at the Court of Federal Claims conference, yes, the remaining petitioners who are in the omnibus autism proceeding, they have the opportunity to go forward and put on additional evidence under Theory One, but they need more evidence to obtain a different result was the gist of the messages.

Theory Two is the same. The issue has been resolved in litigation.

The appeal process has run out.

We've had two cases decided recently. One is Broekelschen. I've

got Cloer here. We had the Cloer decision the last time we met, and this is probably the most significant update I have today. And that is that the Court of Appeals for the Federal Circuit has granted en banc review. And as I've said in a couple of previous meetings, that is extraordinary. It's never happened in the vaccine program. It rarely happens in any program. What that means is the full panel, the full court has decided to vacate the panel decision, the three judge panel decision in Cloer -- that decision is gone; it's been vacated. And they have determined they want to rehear this case en banc, the full court. And so we'll let you know as that progresses. It's now in briefing. The briefs are due I believe in December.

Appeals, these are new this quarter, not necessarily new since the last time we met. We have four entitlement decisions that have been appealed by a petitioner. And we have a case awaiting transfer to the court of federal claims.

MS. HOIBERG: Actually it looks like two have been appealed by the respondent.

MR. ROGERS: You know, you're absolutely right. I'm going to have to check on that. I don't recall that -- no, I'm going to have to check on that. And I might be able to do it while we sit here. I'm going to have to get back to you on that. I'm drawing a blank.

In the Court of Federal Claims, we've had no decisions this quarter.

Pending cases, Veryzer and Hammit are both cases brought by petitioner, and

they're new. And these are oral arguments set for next week. The first two, Masias and Riggins are attorney fees and cost cases. And McCollum is a damages case, and it's also a rule 60B case as I recall. That involves the court's authority to go back and change a judgment after judgment has been entered. It's extraordinary relieve. It's been sought there.

These are the stipulations since the last time we met. And they fall into the -- you'll see a pattern here. There's a center of gravity for the cases.

Three years and a few months, there are quite a few in that category. And then we have quite a few in the one year, almost two years, and then a few that -- as I said at the last meeting, this is about as fast as this program can process a case from petition filing to a settlement. And that's right around just under a year. I think that's everything working perfectly, a well-documented petition that everybody can evaluate right from the start and discuss a resolution right from day one, that's what it requires to do that.

And the last page the same: nine, seven, eight months and a year.

And that's it with the caveat that I'm going to find out about those two cases,

Knight and Porter. I don't recall that we pursued an appeal; that might a typo.

Any questions?

DR. SALMON: So when there's a case where the petitioner voluntarily pulls out of the program, I'm presuming -- but I'd like to know for sure - that means that the petitioner cannot then sue in court because they voluntarily withdrew from the program. Is that correct?

MR. ROGERS: That's not correct.

DR. SALMON: So you can enter the program, and then voluntarily withdraw --

MR. ROGERS: And pursue a civil action. That doesn't affect -you preserve your right such as it is. That's an issue very much at the center of
the Bruesewitz case, the extent to which you have the follow-on right to pursue a
civil action. But withdrawing does not prejudice it in any way, or diminish it in any
way.

DR. SALMON: So my understanding is you can't go civil unless you've gone through the program in one way or another, right? You can't sue in civil court unless you've gone through the program. And I thought it was offered an award that you turned down, or denied an award. And if I understand you now correctly you're saying I can go into the program, voluntarily withdraw from the program, and then look for civil relief; is that correct?

MR. ROGERS: Yes, under the conditions set in the Act, and the gist of it is that you have to give the program a chance, that is a certain amount of time. It's up to 420 days that you have to give the Act an opportunity to resolve your petition. If it doesn't do it in that time, you can withdraw and pursue your civil action.

DR. SALMON: So, if I voluntarily withdrew in less than 420 days, then I could not go through civil?

MR. ROGERS: You could not. And it's more complicated than the

420 days. Generally -- there's a period that can be extended by a request for a continuance, and it's a little more complicated than that. But conceptually that's the idea. There's a certain amount of time around 420 days that if you withdraw after that point you can pursue your civil action.

DR. SALMON: And if it was less than that point you could not?

MR. ROGERS: And I've been passed a note through several hands. It was a typo. Both of the appeals were filed by the petitioner, which was my understanding -- and that slipped through. Are there any other questions?

Thank you very much.

MS. GALLAGHER: Thank you very much. I would now like to move on and ask Dr. Walderhaug to come and speak to us about adjuvants in vaccines.

## Agenda Item: Adjuvants in Vaccines.

DR. WALDERHAUG: You've probably looked at the slides already, and I want to comment that they're kind of a departure. So this is a departure from the previous presentations that you've seen in the sense that I'm going to be talk about the beginnings, the more formative research of risk communication being undertaken by the Center for Biologics Evaluation and Research with respect to trying to do a better risk communication discussion of the various components of vaccines. And this is a bit of a departure, because vaccines are considered generally in terms of the holistic matter. The benefits and the risks

are considered simultaneously. And to look at the risks and the benefits separately, it's done, but generally it's not done in a manner like this, and in the past we've not done a very good job of communicating how we've been looking at risks in the past. And so I'm going to be talking mostly about the risks and some of the benefits of one specific adjuvant, aluminum, with the idea that we're going to try and develop this analysis that will eventually filter down into communications for consumers as well.

But I'm going to talk a lot about science, and I want you to think about this as sort of like being up on the Appalachian Trail with me, in the sense that there are steep parts and there are rocky parts. And as I'm going to lead you, I'm going to have the opportunity of falling on my face. But I want you to know I know how that feels now.

So why is aluminum in vaccines? I'm going to talk about that. I'm only going to mention right now the fact that there has been concern about the potential of neurotoxicity associated with aluminum. And we're going to talk about that in a little bit in the sense that the important thing that I'm going to get to is the fact that aluminum doesn't hang around the body very long -- at least the parts of the body we care about. Generally it leaves those parts very quickly, but it doesn't have a reservoir where it hangs around, and I'll talk about that in a bit.

I'm going to talk about work by the Agency for Toxic Substances and Disease Registry, who basically have done the preliminary toxicological analysis of aluminum, both from inhalation, from oral exposure, and also from

vaccine exposure. I'll talk specifically about a publication of theirs. And then most of the talk I'm going to be talking about how we've updated that analysis, and how basically the message is going to show that there's a safety margin associated with the exposure of aluminum to infants.

So this is the key slide on why aluminum is in vaccines in the first place. And that is that there's a particular component in the cells that we called the antigen presenting cells, the ones that are first to see the antigen, the vaccine or the disease agent. And there's a specific structure, which now has only been really well elucidated, which is something called the inflammasome. And this inflammasome in the presence of aluminum and the antigen, has a much higher response rate for secreting cytokines and interacting with the B cells and T cells, which then develop the immune response to that particular antigen, either vaccine or illness.

So without the presence of these particles of aluminum they're actually insoluble and they're the right size that they can be engulfed by these cells. You would need a whole lot more of the antigen exposed many more times to get a comparable level of immune response. So aluminum is there for a very specific reason. It's there to cause a very strong immune response to those antigens.

Now, this is a summary, sort of the take home message with respect to the Agency for Toxic Substances and Disease Registry. Dr. Keith from that agency did this analysis for the toxicokinetics of aluminum for infants.

And as I go through his slide it's kind of complicated. But the x-axis is the age of days of exposure in a hypothetical infant. And the y-axis is the body burden of aluminum. And the key thing to notice about this axis is that it's a log axis as opposed to a linear one, meaning each one of those units is a factor of ten as opposed to a single unit factor.

And what he has on here on this slide is the minimal risk level, which are these two lines right here. These are the levels that you would expect if there were the maximal level of exposure, that ASTDR thinks is safe, this is where you would be in terms of the body burden of aluminum of an infant.

Now, these two lines down here at the bottom represent the amount of aluminum that an infant would be accumulating as a result of either breast milk or formula feeding. And as you can see there's a little more aluminum in formula than there are in the breast milk. And then this jumpy line right here represents various exposures to aluminum through vaccines. As you can see in this particular one the first exposure would be at birth, and then there's an exposure at 60 days, and the 120 days, and so forth and so on. And this is what was known in 2002 in this particular analysis.

And one of the things that we're going to talk about today is how many of the things have changed on this slide. And I'm going to talk about first of all that the minimum risk level is now changed. And the schedule of vaccines or maximum exposure of infants to aluminum has changed. And there is updated information on how fast aluminum leaves the body of humans. And then also,

one of the things that you might be concerned about is that specific instances you see the infant body burden above this minimum risk level. And we did investigations of the kinetics of the release of aluminum from the injection site out of the muscle -- which I'll show here -- which basically changes our perspective on the level of that body burden exposure as well.

So let's just start going through each one of these parts individually. This is -- we're updating the maximum exposure that infants see. Keith used this particular schedule of exposures in terms of the amounts. Maureen Hess at FDA has gone through all of these possible sequences of the different vaccines and found the one combination that has the maximum exposure. And that's the one we're going to be using for discussing right here. But it's important to understand that most children will not be exposed to this level. This is the maximum level, and we're in the process of trying to figure out what that average level of exposure is going to be as well. I also want to point out that all of these exposures are of course within federal limits for exposures in vaccines.

So here's a brief discussion, but a critical one for understanding his idea of body burden. And what I have here in R -- which is a very complicated function that you don't have to pay attention to -- is a description of how fast aluminum leaves the body as found by the current research on aluminum kinetics. And I want to take a second here to mention, the reason why there's a lot of very current information on this is because of the development of new tracers that help scientist to be able to figure out how fast aluminum that's been

given to a person leaves the body, as opposed to aluminum that's already there.

As you can imagine, there are very low levels of aluminum in humans. And as a consequence, when you add small levels to low levels that are already there, it's very hard to measure what was there, in addition to what was already there. The development of these new tracers has allowed scientists to measure these things more accurately.

And so the key takeaway from this particular slide is that aluminum has three different half-lives. And by half-life I mean that if you waited in this case for the first half-life, 1.4 days, and measured the amount of aluminum present in a body, it would have dropped by one half from that initial starting position. And if you waited another 1.4 days, it would go one half of that. And if you waited another 1.4 days, it would go one-half of that.

So as you can see, it's not a linear release. It's one of these curved releases, so that it eventually flattens out. And this flattening out is where most of the body burden is happening. As you can see there are also other half-lives associated with aluminum exposed to animals, and they're longer. And the next slide really gets to that particular question and helps understand why aluminum appears to be in the body.

Now, I want you to focus on the center box here, which is the extra cellular fluids and blood. And these are various places where the other boxes surrounding that are various places where aluminum can be in the human body. And the one we probably care about the most are the soft tissues, which include

the liver, but also the brain and other parts of the central nervous system. We can see that as we look at the half-lives associated with each of these compartments as reported by this university. A half-life in soft tissues is around 1.4 days, very close to that first half-life that we were talking about before. It doesn't last very long in blood at all. And the reason for that is that if you look at these numbers associated with the arrows connecting the boxes, those are sort of like a sense of how much is going in each one of those boxes once it comes into that box. It's not exactly the same, but you can think of it that way.

So if it goes into the blood, it goes out of the blood very quickly through the kidney and leaves the body relatively quickly. Now, some of these other boxes around the bottom are where we start to see where aluminum is going to be in the body if we continue to measure it. And that is in all cases various components of the bone. So there's a rapidly exchanging pool, and there's a slowly exchanging pool, and then it gets incorporated in various parts of the bone. And once it's incorporated in various parts of the bone. And once it's incorporated to the bone, it generally stays there for a relatively long period of time, but its' a very safe place relative to the other components of the body.

So I want you to meditate on the fact that there's at least 20 to 30 milligrams of aluminum in your bones right at this very moment. And it's kind of an interesting perspective when we talk about how much children are being exposed to.

So the next slide talks about us taking that data and plotting it into a

similar graph that Keith uses. And the other thing I wanted to point out about this particular slide is that when Keith looked at the minimum risk levels, he was looking at minimum risk levels of two milligrams per kilogram per day of an individual. So, it's important to understand also that the amount that you take in orally, a very small amount gets into the bloodstream -- about less than one tenth of one percent.

So we've taken that into consideration when we draw this particular graph here. But this particular limit, minimum risk level, changed from two milligrams per day per kilogram per day, to one milligram per kilogram per day. And so as you look at this particular graph, you can see we still have transient times when it appears as though the body burden of infants is greater than the minimum risk level.

And what we want to alert you to is the fact that -- and I apologize for using the abbreviation IM, which stands for intramuscular -- that experiments are done because of the presence of these new aluminum tracers. We can see that the rate in which aluminum comes out of a muscle is much slower than was assumed before. Depending on whether or not it's aluminum hydroxide, which is used in vaccines, or aluminum phosphate, over a period of 28 days in a particular animal model -- in this case it's rabbits -- only on average 17 percent of the amount came out of the muscles in 28 days, and 50 percent for the aluminum phosphate.

So when we were doing that modeling before, we were thinking that

it was an instantaneous exposure. And so we now have taken a compromised value and say even in a worst case we wouldn't expect all of it to come out in 20 days, but we'll do that modeling and we'll see how the curve looks with respect to the exposures.

And we get a curve that looks like this. And so you can see that because of the delay in moving out of the muscle and into the blood system, that the exposures are well below the minimum risk level as determined by the agency for toxic substances and disease registry. And we feel that this is a very conservative -- that the level is probably lower than this. But in this particular case that this is indicative, though not proof, that exposures to aluminum are relatively small, are within safe limits for infants under this maximum schedule that we're looking at.

I just want to show you the last slide transformed on a linear scale to help put it in a little more perspective. And that's to show you that instead of a log scale, it's now in a linear scale, and you can see that the amounts relative to the minimal risk levels are low and continue to stay low, even wider range compared to as time goes on.

Now, we're still doing research. I've raised this in terms of interim results because we're still not finished with this and we're interested with your feedback on it as well. We want to also get the perspective of what the average exposure that an infant would get, and we're doing research looking at reported schedules and specific vaccines given to children. And our surveillance data,

we're looking to that to get that sort of data. And we are also wanting to put in context how much aluminum infants were exposed to before they were born, in the sense that mother has aluminum in them, and the babies go through the whole development, being exposed to low levels of aluminum as well. And we feel this helps put some of those curves in better perspective.

So I want to argue that the vaccine benefits far outweigh the risks, and aluminum adjuvant increases vaccine efficiency, efficacy, and so it's there for a specific reason. We've use a lot of conservative assumptions, and we can continue to be less conservative or more conservative. We feel that this is a reasonable starting point in our risk communication exercises to show that even under maximal exposures to aluminum, that aluminum never exceeds the minimal risk level set for human exposures, and that where that aluminum resides in both infants and in us is in relatively safe reservoirs that are in the bone, and not in more sensitive areas. And we're committed to protecting and assuring the safety and effectiveness of vaccines. So, I'll take questions. Thank you.

MS. HOIBERG: I just have a question, has there been research to find out if there is a safer way to get the cells to absorb the -- to do the work of the aluminum?

DR. WALDERHAUG: This is just the beginning of a series, I think, of white papers we want to do on a range of different adjuvants that are being used in vaccines. So it's just the beginning. And I want you to understand that

adjuvants are a continuing source of research. So there are new adjuvants being developed, and their safety is being looked at very carefully. So aluminum isn't the final word, but at present we think it's a pretty safe one.

DR. HERR: How were the minimal risk levels determined?

DR. WALDERHAUG: The minimum risk levels were done based on a mouse exposure. And it was done for a neurological effect. And the minimum risk levels that were set in humans are a hundred fold lower than that level that was set for the mice. And that's ten percent for variability in humans, and ten percent for differences between humans and mice.

MS. BUCK: I'm wondering if you've considered background exposure, in addition to vaccine exposure in this?

DR. WALDERHAUG: That's a good question, but we've not included -- the question had to do with if we were including background exposures as well as vaccine exposure. And we do have that background exposure from infant food, but you might be alluding to a fact that there might be still higher exposures for some infants. And we have not looked at that and we probably should try and see what the range of exposure to aluminum are to infants in the form of formula, and perhaps other external exposures.

So we don't have any specific information that we can bring to bear at the present time. We certainly can look at that in the future.

MS. BUCK: Can you also tell me if your guidelines were based on ingesting or inhaling versus injection?

DR. WALDERHAUG: How was the minimum risk level established? It was established on the oral exposure. We've adjusted the oral exposure to the blood exposure by using the factor by which the relative amount of aluminum goes from the oral exposure and gets absorbed in the body. So it was based on oral exposure, but that oral exposure in the graphs that I show have been corrected for the blood levels, and then also the retention function as well.

It's interesting, aluminum is insoluble, so there's very little opportunity to absorb it. But when it goes to the stomach, which is very acidic, it becomes soluble and the brief period of time in which it leaves the stomach and enters the small intestine before it gets neutralized, there's that opportunity for soluble aluminum to be absorbed under those conditions. Once it gets precipitated, then there's no longer a possibility of picking it up during digestion.

MS. GALLAGHER: Thank you very much for that presentation. I certainly learned a lot. And I really appreciate you coming in to speak with us.

MR. ROGERS: After some furious emails I need to clarify that page. The paralegals who put it together are absolutely correct. And here's what happened. The Knight case was a case formerly captioned Rotolli(?), and that is a case in which the respondent has noticed an appeal from the decision of the Court of Federal Claims. Porter is a companion case. And so the chart is absolutely correct. The Knight and Porter cases are entitlement cases in which respondent has noticed an appeal. The briefs have not been filed. So, the chart

is correct. I was wrong.

MS. GALLAGHER: Thank you. Now we would like to get an update on the Center for Biologics Evaluation and Research and the Food and Drug Administration vaccine activities from Dr. Gruber.

Agenda Item: Update on the Center for Biologics, Evaluation and Research (CBER), Food and Drug Administration (FDA)

Vaccine Activities

DR. GRUBER: I'm actually happy to be back here. First I thought this was going to be a really quick update because we last met in the beginning of September, and we really don't have any major new vaccine approvals, although we are very busy with lots of applications and supplements. But nothing really that I can report today. But we had a couple of weeks ago a telephone discussion and Jeff told me that the committee is interested to hear an update on rotavirus vaccines.

And to be honest I was very negative about it at first. And I said I couldn't really do this, I couldn't really speak to this. We have interim data, but I couldn't really make this a whole presentation, and I could only provide the FDA perspective. So Jeff said, okay then, just make it as a statement.

So I thought about it and, you know, as we were thinking about this, additional data accumulated, we had a lot of discussions, not only among the

FDA, but also with the CDC. And so I decided to just make a presentation on rotavirus vaccines, what we know as of today.

One of the concerns I had, however, is because right as we talk about this here, the ACIP is discussing the very subject this afternoon. And so the challenge was a little bit how do we bring these presentations together. I really didn't just want to sit here and put forth one perspective. I wanted to put it a little more in a more global, or sort of a concerted effort.

So until 12:00 o'clock today, I was actually comparing notes and received updates and we had an email exchange with our people in epidemiology and statistics, and they informed me, you know, you're good to go with what you're saying today at the ACCV. No major change is happening this afternoon at the ACIP, so I'm fairly confident that what I'm telling you today is really the state of the art. Probably not as much -- there will be more scientific data, perhaps more tables, more numbers presented at the ACIP. I don't do this. I've put it all in the form of text, but I think the overall message hopefully will be the same.

And I actually wanted to let you know there was some email this morning, there will be a posting of the CDC. I don't know if they've already done that, but then later on this afternoon where you can really see their perspective on the web.

But anyway, to make a long story short, then I forgot to bring my data stick, so I had to go upstairs to be able to put this on. And thank you to

Annie for helping me. So the handouts you have are a little bit different in terms of the first couple of slides because I wanted to make you aware that we're going to have a rather interesting advisory committee meeting to be held November 16-17<sup>th</sup> over in Silver Spring. We're bringing two different products in front of the committee for discussion.

One is that we ask the committee to discuss pathway to licensure for an anthrax vaccine for a post-exposure, prophylaxis indication. And that approval, of course, is going to be done under the animal rule. Then animal rule I've never really spoke about here, and I don't want to really elaborate on this, but that is a pathway where when you cannot do efficacy studies in humans for certain threat agents, you can use animal models to demonstrate efficacy. And anthrax vaccines, it's evident that you cannot do efficacy studies in humans. So therefore we discuss this to go ahead together, how can we license these products for post-exposure indication? And that's going to be discussed by the committee.

And on the second day the committee is asked to review and discuss the safety and efficacy of gardasil, a vaccine that is very well known. But this time Merck wants to receive approval from the FDA for an additional indication, and that is prevention of anal cancer in females and males. And that is the discussion that is going to take place at the VRBPAC on November 17<sup>th</sup>.

So, turning now to the rotavirus vaccines. I think this committee is very well informed, but by way of background, what is rotavirus disease? Well, it

is the leading cause of severe diarrhea and dehydration in young infants worldwide. In the United States it's more like a seasonal disease that occurs primarily during the winter. Before vaccines were available -- and I'm referring to the era pre-2006 -- most children in the United States were infected with rotavirus before the age of two. And this disease resulted in about 55,000 to 70,000 hospitalizations, and even 20 to 60 infant deaths in the United States every year. And there are current estimates that this disease is responsible for the death of more than half a million infants around the world each year, primarily of course in poorer countries.

I did actually borrow this slide from the CDC from Dr. Parashar who gave a presentation on rotavirus vaccines at a VRBPAC earlier this year. And it just sort of illustrates what I just told you, the burden of rotavirus in the United States in 2006.

I thought this was an interesting slide, because it shows you actually the total hospitalizations, counting the total acute gastroenteritis cases in infants. And that's in the blue bars from 2006 to 2008. And the red columns illustrate the acute gastroenteritis hospitalizations due to rotavirus disease.

And what you can see here is that actually in 2008, after the introduction of both vaccines -- not only RotaTeq, but also Rotarix -- in this country, there was a dramatic reduction in hospitalizations. And that's illustrated down there in the bottom of the slide.

So basically what I'm talking about a little bit more is actually the

prelicensure clinical trial that led to the approval of RotaTeq and Rotarix. Only here I want to say that RotaTeq was licensed in February of 2006, and Rotarix was licensed in the United States in April of 2008.

Now, intussusception, without a doubt, it can be serious and potentially life threatening condition. It occurs when one portion of the intestine telescopes into a nearby portion that can cause inflammation, swelling, and eventually decreased blood flow. There are several treatments for this disease. It's a mechanical problem, and it ranges from really sort of enemas to even surgery. But of course, infants can die due to having intussusception.

It's important to state that intussusception occurs spontaneously in the absence of vaccination. And people of any age can have this condition. However, it's most common in infants between the ages of five and nine months in the first year of life. There's one important piece of information, and that is that intussusception can spontaneously occur in the United States in young infants and children in about 33,000 of 100,000 health infants. So that's sort of the U.S. background rate, and that's important to keep in mind.

Now, of course, intussusception has been a concern since the voluntary withdrawal of RotaShield that was a vaccine made by Wyeth's in 1999. It was withdrawn from the market because studies suggested that there were about ten additional cases of intussusception per 100,000 infants who received RotaShield. And therefore the risk of intussusception was evaluated in prelicensure studies for subsequent rotavirus vaccines, and those of course are

Rotarix and RotaTeq.

And these prelicensure studies actually did not demonstrate an increased risk of intussusception in these trials. But one has to point out that it's only after extensive postmarketing experience and surveillance that one is able to more fully understand the safety and the effectiveness of a vaccine. Only when the vaccine is given after it's licensed you get a more complete picture of the vaccine's benefit and risk, because any prelicensure study that you conduct can simply not be large enough to really look at very rare adverse events.

So I would like to turn to the data that we have as Rotarix vaccine, and why the FDA changed the labeling, the package insert for this vaccines. So, first of all, by way of background, it is derived from a human rotavirus strain. The vaccine is administered orally in two doses. This was the first rotavirus vaccine that obtained WHO prequalification. That's a process by which WHO can make available this vaccine for purchase to the United Nations and UNICEF.

It received approval in 2008. And it's distributed to about 76 million worldwide. Of note, only about 3,000,000 doses of this vaccine, Rotarix, are distributed in the United States. And that's very different from what we see with RotaTeg, which I'll show you later.

So how was the safety and efficacy for this vaccine evaluated?

Well, we had a huge trial that was conducted in eleven countries, mainly in Latin

American infants and Finland. A total of over 60,000 infants were enrolled in the study that received either the Rotarix vaccine, or a placebo. We had an efficacy

subset of about 20,000 infants, and the trial demonstrated that Rotarix was efficacious against severe gastroenteritis through one year of age with a number of about 85 percent. And it reduced hospitalizations for rotavirus gastroenteritis through one year, and the number was about 85 percent.

Because the risk of intussusception was known through the RotaShield experience, this trial also evaluated the risk of intussusception, again in these 63,000 infants, whereby about half of them received the Rotarix vaccine. Of course it was the same study. And in the prelicensure trial there was no increased risk of intussusception following the administration of Rotarix within a 31-day period following any dose. This is given on a two-dose schedule. And the rate of intussusception when compared to placebo was comparable after looking at about a hundred days.

Now, in the subset of 20,000 infants that was the efficacy subset, they were followed up to one year. After dose one, four cases of intussusception with Rotarix compared to 14 cases of intussusception with placebo. So these prelicensure data did not really show an increased risk due to the vaccine. And of note, all of the infants who developed intussusception didn't have any adverse consequences.

Rotarix was licensed in 2008 and we do postmarketing surveillance. There is the Vaccine Adverse Event Reporting System that we've heard about here. There were cases of intussusception in temporal association with Rotarix. So once this vaccine was used in this country, the surveillance

system picked some of this up. And we actually included that information in the Rotarix package insert, and also in the patient information that accompanies the package insert.

And so this statement has been in there for quite some time before we even did the recent update. And I want to point out that the patient information sheet is actually a little bit more drastic because it will tell you that these cases have been observed, and some infants needed hospitalization, surgery on their intestines, or special enemas to treat this problem. And there was also death due to intussusception. So the warning and precaution section and the patient information sheet did contain that information all along.

The problem was of course that the VISs never really spoke to that. There was this disconnect. Now, as I stated before, you can only fully understand the efficacy of a vaccine once it's out there. And so for the U.S. we asked GSK -- who was the manufacturer of this vaccine -- to conduct certain postmarketing surveillance studies to more fully assess the potential risk of intussusception. And they've started a study in the United States that involved over 50,000 Rotarix recipients. The study was initiated in April of 2009. We're expecting interim results from the study anywhere between now and April of 2011. So we don't have result available from this very trial.

One of the reasons for the uptick in the United States has been slow relative to international distribution. The safety of this vaccine is also monitored through the Vaccine Safety Datalink that is this large database that

CDC has. And as of today, that system cannot determine the potential risk of intussusception after vaccination with Rotarix because this vaccine is not widely used in the health care settings that are part of the VSD. So we really don't have data on this one.

GSK, following approval in the European Union also was required by the European Medicines Agency to conduct a postmarketing study. And that is the Mexico PASS study. PASS stand for Post Authorization Safety Surveillance. And it assessed the risk of intussusception occurring within the first 30 days following Rotarix vaccination. And this study actually involved more than half a million infants. And the first subject was enrolled in January of 2008, and we expect the final study report in 2011.

But the company took an interim look at the study results, and the data suggests a small increased risk of intussusception following the administration of Rotarix within the 31-day period after the first dose of Rotarix.

In particular that appears to be a cluster within seven days following the first dose of Rotarix.

And so we became aware of this data and we decided that basically for transparency reasons, we needed to update the labeling for Rotarix to make the health care provider aware of these interim data. Again, I need to reemphasize that we don't have final data from the study available. And we went a little further. There were a lot of internal discussions. And we said how are we going to be using the data? Can we translate these findings in some way to the

U.S. infant population? And some of our experts did perform these calculations, and they said that if we translate these findings, these interim results from that Mexican PASS study to the United States situation, then we would think that these finding may translate to potentially a minimal range or four additional cases of intussusception hospitalizations per 100,000 infants within 31 days of receiving the first dose of vaccines.

These calculations took into the consideration the background rate of intussusception in the United States, which is about 34, 35 in 100,000 infants per year. Of note, however, is that the study was conducted in Mexico, in Mexican infants. And the background rate of intussusception in Mexico is much higher than it is in the United States. So there is a little bit of uncertainty in terms of these 0 to 4 additional cases per 100,000 infants. Nevertheless, we thought it was a conservative estimate to make with the interim data available to us.

So, as I stated, we added additional information to the existing intussusception subsection of the warnings and precaution section of the prescribing information to let health care providers know about these preliminary findings from the study conducted in Mexico. We have to emphasize, though, that these findings are preliminary. They require further evaluation. The study is ongoing. The final study report is not available at this time. And of course we're going to be reviewing the data when the final study report is available and continue to evaluate.

So this is just the language as it is since we updated the prescribing

information for Rotarix in September of 2010. And I don't need to read through this right now. I just wanted to point out that at this point we have not changed the contraindication or indication for use section of the label.

Now there are, as I mentioned, a couple of postmarketing surveillance studies ongoing throughout the world. So there are multiple studies with varying study design, product exposures, background rates of intussusception, and there's a different population age distribution. And one of the study is what I just described, the Mexican PASS study, which had these interim results of a small increased potential risk of intussusception.

But there are other studies currently ongoing. One is sort of like a concerted effort by PAHO and CDC. And this study is also conducted in Mexico, but in a different infant population, so it's not the same population of infants that were in the Mexican PASS study. And actually the interim data that's available so far indicates that the intussusception risk in this PAHO/CDC sponsored study is similar in magnitude following dose one of receiving the vaccine than the Mexican PASS studies show. So we have sort of concordant findings there.

However, there is yet another PAHO sponsored study that is currently ongoing in Brazil, in Brazilian infants, and that do not show a significant evaluation and risk of intussusception. So, you know, I'm not saying this is contradicting, but there's a different outcome here. And then there are further studies conducted in Australia. I think they only have a few cases right now, and I don't have much information available, so I don't want to really get into this at

this point.

So to summarize the Rotarix part of it, I think what we can say we have to find a signal -- and I'll talk about this a little bit more at the end of my talk after discussing RotaTeq. We have to see what we're going to do with the data. And we have to wait from the final study results from the other currently ongoing studies, including the studies conducted in other countries.

RotaTeq, that's a little bit more straightforward at this point.

RotaTeq is a vaccine that's a little different than Rotarix. It contains pieces of the human rotaviruses, and pieces of the bovine rotaviruses. It's also administered in a different schedule. Here we need three doses to be administered to the infants orally.

The vaccine was approved about two years before Rotarix was approved. And of note, 37 million doses are distributed worldwide, and the major chunk is distributed in the United States, 30 million, versus only about 3 million of Rotarix.

So we also asked Merck to do a large prelicensure trial. They enrolled about 72,000 infants altogether in three placebo controlled clinical trials. The REST study -- I don't know what REST stands for as an abbreviation -- for that big safety and efficacy prelicensure trial that they conducted. These kids, there were 34,800 vaccine recipients and 34,700 placebo recipients. Efficacy looked good against rotavirus gastroenteritis it was about 74 percent, and against severe rotavirus disease, about 98 percent in that prelicensure study.

Infants were also monitored by active surveillance to identify potential cases of intussusception at seven, 14 and 42 days after each dose, and then every six weeks thereafter for the first year. Cases of intussusception occurred within 42 days of any dose. Well, we looked at this. There were six cases among RotaTeq recipients and five cases among the placebo recipients. So the data did really not suggest an increased risk of intussusception relative to placebo in the prelicensure arena.

Merck of course was also asked to conduct a postmarketing surveillance study. And I think their study was conducted in the United States. That study was just completed. It involved about 85,000 RotaTeq recipients. We just received the data sets. It's under review. I don't really want to say this with total certainty, but right now it doesn't appear that there's an increased risk. But again the data are under review and we just don't have the final outcome of that study yet.

MS. HOIBERG: You're talking about having the test groups, and you have a group that's given the actual vaccine and a group that's given a placebo. Are they literally being given like sugar water? Is that the placebo? Or is it some other type of -- I mean, they're not being vaccinated?

DR. GRUBER: No, in these studies they're not vaccinated. It was not an active control. To my knowledge it was saline. But I'd have to double check that actually. But when my people told me placebo, and that really means it's saline. It's not an active control. Active control would mean another vaccine.

But I'll have to double-check that for you.

But here in the post marketing safety, that's very different. That's really 85,000 kids who got RotaTeq. Okay? So that's the difference in prelicensure versus postlicensure. So when I say here 85,000, it was really 85,000 who got the RotaTeq vaccine.

So again, of this RotaTeq, as with Rotarix, there are additional studies ongoing. One I just mentioned on the previous slide is the VSD study. This study is ongoing. There are lots of doses looked at; 800,000 total doses. We hope as the study is ongoing we get more safety information to help us better understand the potential risk of intussusception with RotaTeq. Right now the study or the doses evaluated is not large enough to rule out the level of risk suggested by the preliminary analysis of the postmarketing study of Rotarix in Mexico. So we really don't know, because the Mexican PASS study has so many more infants.

I talked about this; I don't really have to repeat it. I just want to mention that as for Rotarix, the RotaTeq prescribing information and the package insert also includes information about the potential risk of intussusception and that the cases have been reported in temporal association. And this was picked up by the VAERS system and it found its way into the warning and precaution section of that labeling as well, as well as the patient packaging information.

We did at this point not change the RotaTeq package insert because the Mexican PASS study did not use RotaTeq. However, the

information that FDA has currently available does not suggest an increased risk of intussusception from RotaTeq.

So I think what I wanted to conclude with, I wanted to basically discuss or make the following very cautious statement. And I have to say I peeked at the anticipated posting of CDC and took into consideration discussions that we had, and slides that were exchanged, and I think it is safe to say -- and it's a cautionary statement, because the studies are all ongoing at this time.

From the Rotarix postmarketing surveillance I think we've seen a signal. We need to determine what it really means. The data currently available to us from postmarketing surveillance indicate the possibility of a small increased risk of intussusception shortly after the first dose of rotavirus vaccination in some populations. However, the level of risk observed in these postmarketing studies is substantially lower than the estimated risk following receipt of RotaShield, which saw about one case of intussusception per 10,000 vaccinations.

We have so far not yet determined an increased risk of intussusception in the United States of the magnitude seen in Mexico. Simply we don't really have the data available either. Our postmarketing studies in the U.S. are currently ongoing. But to be very cautious, I think the current estimates are -- and again this is not final. But if a similar risk will exist in the United States as that seen in Mexico, then this would probably translate to one additional case in 100,000 infants. In contrast, RotaShield was one case in 10,000.

So, in the end it will come down to a risk-benefit consideration and

decision. And we cannot forget that the benefits of rotavirus vaccination are substantial. They include prevention of hospitalization for severe rotavirus disease in the United States and of death in other parts of the world. Currently we think that the benefits of the vaccines, which are known, outweigh the suggested increased risk for intussusception or any other potential risk. Again, FDA and CDC will continue to closely monitor the safety, not only of Rotarix, but also RotaTeg vaccines. And that concludes my brief update. Thank you.

MS. GALLAGHER: Well, let me start by thanking you for all of the work that went into this, particularly all of your last minute exchanges of email and data. We really appreciate you coming here and talking to us today about this.

DR. FISHER: Since Rotarix appears to be the one internationally used more often, is there any other country besides Mexico where there's been any signal at all of an increased risk?

DR. GRUBER: Well, I mentioned the study in Brazilian infants, and there it appeared that there was no increased risk. There is a study in Australia. The number of cases are very low, right now. There are issues with the postmarketing surveillance. There appears to be some evidence of a small increased risk, but it's really -- it's not certain at this point because, as I said, there are not enough cases. And our experts are really not clear on that. That's about the range of the studies that we are aware of.

DR. FISHER: Okay. And worldwide it's been about six years now

for Rotarix? It was started in 2004?

DR. GRUBER: Rotarix was licensed in 2004, yes. Not in this country. Rotarix in Europe I think it was licensed in 2004, and then here in 2008.

MR. SCONYERS: Thank you very much. I really appreciate the presentation. You are always so helpful to us. I had some questions just because I'm a non-statistician and I just want to understand things. On slide number 16, when you're talking about the postmarketing studies of Rotarix, your first bullet says for the United States these findings translate to potentially a zero to four. And just given what the background rate of intussusception is in Mexico versus the U.S. I just don't think I understand what you're saying. Are you accounting for the different rate in the U.S. versus Mexico?

DR. GRUBER: That's a very good question. We had a lot of discussions. I want to say, I'm also not a statistician. And I have actually -- presently I have some problems making such statements because they took into consideration the background risk in the United States. I do not know, I didn't fully understand how they adjusted for the much higher risk of the background in the Mexican study. But, again, zero to four is a wide range. It can mean nothing; it can mean four cases. Right now people think that it's like one in 100,000 cases. So I wish -- I cannot really add to this because I was not, you know, I didn't do these calculations. I just have to admit that I share a little bit these concerns: how can we really translate these findings?

MR. SCONYERS: As I listen to you describe the other studies,

though, I don't hear any study that settles on one in 100,000. I hear a variety of studies that have an approximate rate of zero to four per 100,000, and other studies that have a nondetection rate of increased risk. So I wondered if we can get to a good result just by averaging the outcomes. I'm just a little confused by that rate. But that's more editorial than --

DR. GRUBER: But it's a legitimate concern, and I think one always has to be very careful when one makes these statements based on interim results without having the final data available. But then again, you know, you also don't really have the luxury to really wait until these studies are completed.

MR. SCONYERS: Can I ask you a couple of more general questions? One is, within CBER do you have a target detection rate for new products in terms of adverse events? Are you trying to power studies at a level to detect a given adverse event rate, or is that specific to the product that's under consideration?

DR. GRUBER: That is a very good question. So for any new vaccine that is undergoing review, what we're trying to do -- for new products really the rare adverse events are really not known. You don't know what you can encounter. And so we're trying to power this study to really be able to detect an adverse event that can occur at a rate of one in a thousand. So in prelicensure study, you want at least 3,000 subjects involved in a safety study.

One in a thousand, of course, is a rather frequent event. So, the RotaTeq and Rotarix prelicensure study were sort of special. There was a large

number of infants enrolled because we knew about the intussusception risk because of the RotaShield experience. And so these prelicensure studies were powered to really be able to detect a risk of intussusception.

But it's really a challenge if you look at any other new product approval, it's because some of the risk you don't really know what to anticipate. So as a rule of thumb, you want to see something one in a thousand. And then when you look at safety endpoints, it depends on the product.

MR. SCONYERS: So, again, in powering the Rotarix and RotaTeq studies, if there's a known background rate -- so intussusception is obviously a concern to anyone who's looking at rotavirus vaccines because of the history here. And so if we're looking at a rate of 33 per 100,000, does that mean that the studies have to be powered -- I'm just doing multiplication here -- does that mean they have to be studied in a population of 300,000 or more? If one in a thousand takes a study cohort of 3,000, do you have to have 300,000 to detect one in a 100,000?

DR. GRUBER: I don't think that you can do the calculations this way. And again, I am not a statistician. I just tell you that when they're powered -- the Rotarix and the RotaTeq prelicensure studies -- they did take into consideration background rate and the rates of intussusception that they observed with the RotaShield vaccine, and they came up with that sample size. Okay? How that's done specifically, again, I'm not a statistician; I cannot really speak to that. But the problem is that you run -- with some of these adverse

events you run into sample size calculations that an be prohibitively large, that you can't really do those in a prelicensure.

MR. SCONYERS: Of course. But when I look at the sample sizes that you were citing in the Rotarix and RotaTeq cases, for detection of events occurring in the one or multiple in a 100,000 range, which given the background rate, that's what you'd be looking for. It seems potentially underpowered.

DR. EVANS: A little, of course, perspective -- I mean when Merck went forward with the RotaTeq clinical trials, I believe that they were trying to rule out a one in 10,000 at least to have that kind of a power, because that's what our understanding was up to that point, because that was what happened with RotaShield. Could it have detected one in 20,000, one in 25,000? I don't know. I'm not a statistician. But I think at least the people that did the study were reasonably confident that it had the power to detect that there was a rate that wasn't nearly as frequent as what happened with RotaShield.

Now, when you're talking about one in 40,000, one in 50,000, you're talking about doing clinical trials in the hundreds of thousands, as your question addresses. And that is something that at the time there were discussions they talked about doing these kinds of trials. Of course, they're prohibitively expensive and not practical to do. But these were the kinds of discussions that were occurring at the time.

MR. SCONYERS: I understand there's a dilemma because if you power the study not to detect any occurrence anywhere, then essentially you

have to use the population of the earth as your study cohort.

DR. EVANS: Which is why the postmarketing experience really becomes the tale of the tape.

MS. GALLAGHER: Again, Dr. Gruber, thank you very much for all of your work on this. We really appreciate it. Now, Dr. Vito Caserta.

MR. SCONYERS: Before we go on, can I just refer to our conversation this morning about the VISs? This information from Dr. Gruber is incredibly helpful, direct and straightforward, and helping me at least to understand some of the considerations behind what's being said in the VIS. As I listen to her presentation, I have the same concerns that I had listening to the folks from the CDC this morning, that is that they do seem to be cherry picking how they want to present this. So I wish we could have done these in conjunction. I understand the reasons that we couldn't. But I am concerned about the way that the subject matter experts on the rotavirus VIS resolved some of the current ambiguities of the data in the way that they're presenting this to parents who are making this choice.

DR. EVANS: And your comments are on the record, and you're always responsible, the ACCV, to provide consultation on the revision of VISs. And I think that these comments will be taken into consideration when they do the final form. Clearly if FDA has one set of information materials, and CDC has another, there's going to be some confusion.

Agenda Item: Rotavirus Vaccines and the Vaccine Injury
Table

DR. CASERTA: It's good to be back in the hot seat.

DR. EVANS: Before Dr. Caserta begins, I just want to maybe lay a little bit of groundwork. As the agenda committee was putting together their suggestions for this meeting with the Rotarix that had just been announced by FDA for labeling purposes, the question came up, the request came up to come and talk about what this would mean to the program, particularly because as the Commission recalls, intussusception was on the vaccine injury table previously -- and Dr. Caserta will get into that.

But the purpose of my asking Dr. Caserta to provide this information is because he was central as chief medical officer to our adding the intussusception as a condition to the vaccine injury table, and also in terms of reviewing and the adjudication of claims. And so I wanted him to both provide that insight, being part of that, as well as remind you and give you a primer again on what the process is for adding conditions to the vaccine injury table and what we go through to do that.

DR. CASERTA: Thank you. It feels good to be back actually. So what I'm going to try to do is give some process and history of what happened a decade ago with rotavirus vaccine. And I'll start with generalities and I'll sort of try and hone down to more specifics on the table modifications.

Io in modifying the Vaccine Injury Table, the Secretary has the authority to do that. And the Secretary can modify the table itself and the aids to interpretation. By adding and removing injuries, conditions, time frames, and/or adding and removing vaccines. So that's how the modifications generally occur.

If we focus on adding injuries and conditions to vaccines that are already on the table, the National Childhood Vaccine Injury Act provides the authority to the Secretary to do the administrative revisions. And the way the Secretary does that is by promulgating regulations to modify the table. So the regulations begin with the Secretary to do that.

Now anyone can petition the Secretary, including the ACCV, to make such changes. And the ACCV has a special role in that there's a mandate that the ACCV review any proposed changes to the table in this way.

So, what's the process? Generally -- and each table changes hasn't happened this way, but this is in general how it occurs. Science shows that there may be a need for a table change. There's internal discussion and consultation and review within the agencies, within HHS, and maybe sometimes even DOD and interdepartmental consultation. ACCV is involved in that consultation and review.

If it's decided that a table changes may be in order, a Federal Register publication of a notice of proposed rulemaking is printed in the Federal Register. And these have a 180-day comment period. So people have half a year to submit their comments. Once the comments are submitted, there's also

an opportunity for public hearing. And those have usually followed ACCV meetings in the same room.

And once all of the comments are in, they're integrated into a Federal Register publication of a final rule. And once the final rule gets published -- and usually the effective date is 30 days after the publication date. With any table change where an injury is added, there's an eight-year retroactive period where people are eligible to file from the effective date. And they have two years in which to file. So if someone waits the whole two years and files it on the last day, they could file for an injury that happened ten years previously.

So a little gear change -- before I was talking about adding injuries and conditions; now I'm talking about adding new vaccines. And there are two prerequisites for doing this. You need both legislation and rulemaking.

The legislation is the excise tax. And the excise tax sort of governs the effective date. So if you have both things, it's the excise tax effective date that controls when the effective date of the table change is. And again, there's the eight and two years like I mentioned before.

The rulemaking come from 1993, and that rulemaking happens this way. There's a Federal Register publication of a notice of coverage when we want to add a new vaccine via the Secretary. And this is done after the CDC recommends the vaccine for routine administration to children. And what triggers that is the ACIP making that recommendation to the CDC. So that recommendation becomes official, not at the ACIP meeting, but when that

recommendation is published within the MMWR.

So the recommendation gets published in the MMWR. The Secretary publishes the notice of coverage. And if you have the excise tax in place, then you have a new vaccine on the injury table. It goes in that last box where it's not by itself, but it's with all the other vaccines that haven't gotten its own separate box. But that allows it to be covered within the program.

Another gear change -- we'll start talking more specifically about RotaShield and what happened with that vaccine over a decade ago. So RotaShield was licensed on the 31<sup>st</sup> of August 1998, and distribution began a couple of months later on October 1<sup>st</sup>.

The MMWR published a routine use recommendation in March of the following year. And so at that point both the AAP and the American Academy of Family Practitioners were also recommending that the vaccine be used. So at that point the vaccine started to be used much more. And a couple of months later VAERS was noticing that they were seeing this unusual uptick of cases of intussusception being reported. And by May of 1999 they had nine cases reported, which doesn't sound like a lot, but in the whole history of VAERS to that point with all the vaccines that were being reported to VAERS they only had four cases of intussusception total. So to get nine cases all of the sudden in the course of two months, all for one vaccine, was striking.

So with that information CDC went ahead and got the -- started some epidemiologic studies with Trudy Murphy and others that were working on

this. And that began in May of 1999 also. And as the results started coming in and more cases being reported to VAERS -- by July VAERS I think had about 15 cases reported. And the epidemiologic studies were showing a trend toward intussusception. They weren't powered yet to have a statistically significant increased risk, but with time it was clear that would happen as the study got more powered. It might not, but the concern with the VAERS reports caused CDC to go ahead and recommend suspension of the vaccine usage on July 16<sup>th</sup> of 1999.

The study that I was mentioning before was a 19 state case-controlled study. And when that study was finished it ultimately showed fairly strongly statistically significant association. There was a relative risk of 21.7 and 29.4 respectively. They did two studies; they did a case-controlled study and a case series analysis in the three to 14 day period following intussusception.

So with that information sort of developing the manufacturer withdrew RotaShield on October 15<sup>th</sup> of 1999, and ACIP withdrew its use recommendation on October 22<sup>nd</sup>, a week later. And by December 2000, a year after that, VAERS had already received over 100 cases, reports of intussusception, with 58 of them being within a week. But it's important to note that there were none after July 1999. So when CDC withdrew its use recommendation, it appears that people stopped using the vaccine because we didn't see any more intussusception from the vaccine after that.

Half of the cases that were reported to VAERS required surgical intervention, and the remainder being reduced with -- Marion, I don't know, what,

one? There was one confirmed death.

Another slight gear change, now we'll talk about adding rotavirus vaccine to the Vaccine Injury Table. As I mentioned before, the excise tax was -- I guess I didn't mention this. The excise tax was in place and the effective date was October 22, 1998. CDC recommended RotaShield for routine use in children in the MMWR on March 19, 1999. So these are the two pieces that you need to add a vaccine to the table.

The program was able to publish a final rule to put the vaccine with its own box into the Federal Register in July 1999. And it announced the general category of rotavirus vaccines -- not this specific vaccine, but just a general category of rotavirus vaccines. And the final rule was published, and once it was published, the effective date for the program for people to file was October 22<sup>nd</sup>, 1998, because that was the effective date of the excise tax.

When this was going on, we were recognizing that of course it was pretty clear that the vaccine was causing intussusception, and we were getting cases filed with the program. One of the dilemmas and difficulties we had was at the time someone needed to have six months of residual effects in order to receive compensation. And so if a baby developed intussusception after the vaccine and required hospitalization and then required surgery, by six months they would be totally healed and there would be -- they wouldn't meet that. But we felt that was significantly serious enough that Congress really would have intended -- if surgery was part of the thinking of vaccine injuries, which it wasn't

prior to that, we thought that it would make sense to ask Congress to make that change, which we did.

And the child health amendments of 2000 allowed for us to compensate claims if they met the six-month residual effects, or if they experienced inpatient hospitalization and surgery. So you would need both. So that allowed us to start compensating these cases under causation and fact while we were working on getting the specific table changes in place for intussusception.

There was a noticed of proposed rulemaking that was put forward in July 2001 that proposed adding a second category of rotavirus vaccine, which is specifically the live oral, rhesus-based vaccine. And it proposed adding intussusception with an onset of zero to 30 days. And again, we gave the benefit of the doubt, because the studies at the time, it wasn't clear exactly where the end date was. And we wanted to be inclusive with this. And we decided to use a time period of 30 days as opposed to 21 days or 14 days to allow the table presumption.

So the propose rulemaking was published. There were no public comments received and we had a public hearing on December 6, 2001. And the final rule was published in July 2002 with an effective date of August 26, 2002 adding this to the table.

Now, remember, the vaccine is no longer being given; it hasn't been given for years at this point. So this was on the table so that we could

compensate those folks who were injured previously. There was a final rule published that removed the vaccine from the table as sort of a house cleaning maneuver in November or 2008. And that was discussed with the ACCV in December of 2008. Again, it was because this vaccine was no longer being used. But the general category of rotavirus vaccines was still there. So if someone -- even though none was licensed, it was still there. We left that open.

So with our claims experience we started receiving claims in 2000. We had a total of 31. Twenty of them were compensated; eleven were dismissed. And we worked -- we tried to be fair with similar effect patterns. So a child who had intussusception and needed surgery and had no complications, we worked with the attorneys' at DOJ and with the court to try and provide level compensation, equal compensation for that very simple effect pattern. Now, of course if people had a lot of complications, then we worked those cases. That was another issue that we -- that was new to us where we have a whole bunch of people with sort of the same situation.

Now we've got RotaTeq and Rotarix. You just heard about those today. We've had 15 claims filed since 2008, with four adjudicated, two compensated, and two not compensated.

So the CDC is doing their review, and FDA, of the postmarketing studies for both vaccines. ACIP was presented the data today and are reviewing it, and our staff, the DVIC staff will do their review and discuss the issues with you guys at the March ACCV meeting. Any questions.

MS. HOIBERG: So you are considering putting the two rotavirus vaccines back -- I mean I know they're on the table, but are you going to put intussusception back on the table? Is that what you're looking at possibly doing?

DR. CASERTA: I'll turn to Geoff to answer that.

DR. EVANS: The answer is that's depending on the data that's coming out now, that I yet have been able to be privy to. Certainly the staff will review that in consultation with agencies. And the short answer is yes, it will certainly be under consideration. It's something that I know the ACCV will want to be briefed on and discuss. And in the past we have come to the Commission with proposals. There's nothing that would prevent the Commission on its own to vote to advise the Secretary to add it also. So I think this is a dynamic situation right now because it is evolving, as we've learned from Marion, for example. But I suspect that we'll have something more definitive to report at the March meeting.

I think one of the key messages I wanted Dr. Caserta to communicate to you is that just because it's not on the table --

MS. HOIBERG: Right -- doesn't mean it's not covered.

DR. EVANS: Exactly. We're receiving claims. We can certainly go ahead and make judgments in terms of conceding entitlement based on causation and so on. So it's not as though we're waiting to do something procedurally. We can certainly be very proactive in the way we conduct the evaluations before these types of things happen.

MS. HOIBERG: Right. Well, in adding injuries to the table, where are we on thinking about influenza and adding GBS, because as we can see, most of our claims are GBS in regards to the influenza vaccine, there's an awful lot of them.

DR. EVANS: And we also have the letter form the daughter of a potential petitioner that's in our book, and again, anyone -- the ACCV is by law one of the bodies that is to receive petitions for considering adding injuries to the table. I think a clear desire at this point is to wait for the Institute of Medicine to provide us their report in June. They will be considering influenza vaccine and to take and look at their results, and then come back to the Commission with our thinking based on what they've come up with.

So it would be, I think, premature at this point to do anything about influenza and GBS, because again we're talking about a different vaccine every year. The Institute of Medicine in 2002 where the Immunization Vaccine Safety Committee actually didn't find that there was any proven evidence of a relationship between influenza and GBS, other that the '76 swine flu. So this will be additional evaluation that the Institute of Medicine will do, and we look forward to receiving it.

DR. CASERTA: I'll change my hat, because my current job is the Director of the Countermeasures Injury Compensation Program. And Geoff is absolutely right. Right now it's premature to know what to do with GBS and influenza. A great deal of surveillance occurred this past year regarding H1N1

vaccine and it's association with GBS. The data is still being analyzed, just like with rotavirus. And the data is not in yet. In the next 30 to 60 days the National Vaccine Program Office is coordinating end of season analyses by the different agencies that are doing careful study with regard to this. So there's more information on the horizon that's coming, that's potentially, may be robust information to look at this question.

And we have to decide what we're going to do regarding H1N1 monovalent vaccine, which is not covered by VICP. But that antigen is in this year's seasonal vaccine. So what we do will affect you. So anything we do, we'll do in consultation.

MS. HOIBERG: Well, because the new shot is covered under the program because it includes the trivalent.

DR. EVANS: Now I want to clarify. I was giving you the every vaccine but H1N1 answer.

MS. HOIBERG: I knew that.

DR. EVANS: Okay. So that's a very good point. And the Institute of Medicine is not going to be reporting on the H1N1 because the data is so new. So that's going to be potentially an example where we will have to rely upon the data that's being generated through the department.

MS. HOIBERG: And what concerns me is that with the testing that went on in Dan Salmon's group, H1N1 did throw up quite a few signals, although they were weak, they were still signals. And so now it's being added, has been

added into a vaccine that was already as we saw when added to the program, that's the majority of our claims are influenza vaccines. So I'm just very much concerned with the amount claims that we're going to be receiving now that H1N1 has now been added to an already -- I mean I think a horrible vaccine that's causing lots of injury.

MR. SCONYERS: Can I ask what I think is a related question?

One of the things that we've heard over the past several meetings is that -- in fact, demyelinating conditions are being compensated under the program, but one of the reasons they're not on the table is because there's a variety -- actually the etiology of demyelinating conditions isn't very well understood, and there may be a number of factors associated with them other than vaccines.

When I look at what you guys did in 2001, you made a decision to add a condition to the table where the incidence rate was, using my rudimentary math skills, about a quarter of what the background rate is. So approximately 80 percent of intussusception was not attributable to RotaShield, and about 20 percent of intussusception was attributable to RotaShield. But it became a table condition, so you removed any issue about causation. I don't understand what you were thinking in 2001 and how it compares to what you're thinking now. Can you explain that a bit?

DR. CASERTA: The difference is intussusception is much more common. So, when you're talking about GBS, you're talking about in the background a rate of one in 100,000. Maybe the H1N1 vaccine is causing one

extra case per million people. So you're talking a much more rare event, which is much more difficult to study and get a robust increased relative risk that's statistically significant, because you need a huge sample size to do it.

Whereas with rotavirus and intussusception the sample sizes could be significantly smaller and we were able to get very strong, statistically significant relative risks of 20 to 30 in the Trudy Murphy study. So there was a -- the increase in risk after getting the rotavirus vaccine was 20 to 30 times the background rate in that two-week period three days to 14 days out. So that's a very big effect. So we were able to see it and we were able to be certain as certain can be in science that this was a real effect. So that's why we were very proactive in getting these changes made back a decade ago.

MR. SCONYERS: But it's a real effect against a real background rate of real cases that have nothing to do with vaccine. So I don't understand why you didn't take the same approach that I think the program is currently taking, which is on a case-by-case basis, making a decision in favor of compensation.

DR. CASERTA: Well, because we don't have the epidemiology to back it up. We don't have the statistically significant relative risks that are greater than one on a regular basis. Now, there are specific years where we do. There was '92 to '94 I think, and of course the swine flu years. But other than that there really isn't anything. And most of the other years that have been studied show no effect or no increased risk.

MR. SCONYERS: You're answering the question from the other perspective. I'm asking why you added it to the table, now why you're not adding GBS to the table. I'm asking why you added intussusception to the table when there is a known background rate of intussusception that's not associated with vaccines? So you resolved causation in those cases in favor of vaccine causation.

DR. CASERTA: Well, that's the point of the table.

MR. SCONYERS: I understand that. Scientifically, that was incorrect. There's a known background rate of intussusception --

MS. HOIBERG: Yes, it's 33 in 100,000 happen --

MR. SCONYERS: This is about the fourth time today we've had this conversation.

DR. EVANS: You're talking about a relative risk in the twenties versus a relative risk of 1.8 for Rotarix, for example. You're talking about something that is a very slight relative risk. In the example in 1994 in the IOM report with tetanus containing vaccines and GBS, there was no suggested epidemiology. There was no epidemiology that even suggested an increased relative risk. But the point is, Jeff, that there were cases that were -- there was one suggestive case of the individual we had three times. There's always going to be different determinations made. With intussusception, as Vito pointed out, it's a much more frequent occurring injury in terms of the population, and we had very strong epidemiology suggesting it.

With demyelinating conditions and GBS with a different influenza vaccine every year, the epidemiology is not nearly as clear, and it certainly is inconsistent. So there's going to be different thinking depending on the vaccine and the condition that's involved.

MR. SCONYERS: Okay. I hear what you're saying, I just don't get it, because I think it's really inconsistent with what we've heard over many meetings about the approach to table cases as opposed to causation of fact cases. If that's the case, that's okay, but I don't get it because you chose in 2001 to compensate a series -- well, potentially to compensate a series of intussusception cases that had nothing to do with vaccination by making that table change.

DR. CASERTA: I think that's where there's the confusion. When you say that there's a relative risk of 20, what you're saying is within the period of time that that relative risk is in effect, which is what it was for the vaccine. When you say that there's a relative risk of 20, what you're saying is in that time period your chance of getting intussusception is twenty times the background rate. So if someone develops intussusception during that time period, it's twenty times more likely that it's from the vaccine than it is from the background. So it's very clearly evident that the vaccine is at play with the rotavirus -- with that vaccine and intussusception.

Now when we're talking about relative risks of 1.8, you're saying well, there may be a little bit less than two times the background rate in that

period of time. And then we're seeing that without consistent statistical significance. So the numbers are not reliable. So that's the basic difference.

MR. SCONYERS: Thanks, that's actually very helpful to understand. There was the potential for compensating certain cases of intussusception that were not vaccine associated, but because of the overwhelming frequency with which those cases related to vaccination you decided that it was better to overcompensate a few non-vaccine cases than to put all of those people through -- that's helpful. Thank you.

DR. EVANS: Plus the biological plausibility, plus the fact that the vaccine related intussusception seemed to be drawing cases at an earlier age range. So you had that factor, too. So, like I said, there are various factors that go into these decisions, and you can't just use a cookie cutter approach and say we'll do it this way for each particular one. Not that you're suggesting that.

MR. SCONYERS: The consistency here is the overwhelming statistical evidence that you had around the affect of the vaccines at that time. So that's helpful. I appreciate that.

DR. FISHER: Plus the fact, I mean it was enough that it was withdrawn from the market and taken out of use.

MS. GALLAGHER: Thank you very much. That was very enlightening. Is Dr. Gidudu on the telephone?

DR. GIDUDU: Yes, I am.

MS. GALLAGHER: Oh, great, thank you. So we will have an

update from the Immunization Safety Office then. Would you please proceed?

## Agenda Item: Update on the Immunization Safety Office (ISO), Centers for Disease Control and Prevention (CDC) Vaccine Activities

DR. GIDUDU: Good afternoon. I do appreciate this opportunity to again give this update. I'm sorry I wasn't able to come.

Moving on to the next slide, I'll be talking about recent publications, and there's one in your binders. The rotavirus vaccine safety update as been really discussed by Dr. Gruber, a brief update on HPV, as well as vaccine safety monitoring for the influenza season.

So I'll talk about the three studies, but the one that is in your binders that was published in Pediatrics, that is on tab 9.3, published in Pediatrics by our VSD group here at CDC. This study adds more comprehensive data to the existing science on the vaccine safety of thimerosal in vaccines and immunoglobulin products, which should help to further lessen concerns regarding obtaining vaccines for children.

The study found that exposure to thimerosal during pregnancy and in young children was not associated with an increased risk of autism, ASD, or two subtypes of ASD: ASD autistic disorder and ASD with regression. This study is the most thorough, up-to-date on this subject. It's included consultations

by experts and representatives of autism and advocacy groups. It incorporated assessment administered by research staff trained by leading autism experts. It was based on well documented data on exposure to thimerosol-containing products. I was controlled for many factors that would influence the course of autism or receipt of immunization. It represents a study to provide data indicating that thimerosol-containing immunizations would increase the risk of some types of autistic spectrum disorders, including ASD with regression.

It provides the strongest evidence to date that immunization during pregnancy, including flu vaccines, does not increase the risk of ASD. Although thimerosol is currently only used in multi-dose vials of flu vaccine, CDC is aware of the concerns that arose when thimerosol was used as a preservative in other vaccines that children may have received, including misconceptions that these vaccines were related to autism.

This may have made decisions to vaccinate children difficult for some parents. So this study has more comprehensive data to the existing science and safety of thimerosol in vaccines, which should help to reduce those concerns.

So going to the next slide, which is a publication by Vellozzi and others here, and I provided most of this data to you previously and the main points here are that they have received a lot of adverse events reports of the 2009 H1N1 vaccine for persons vaccinated in the first four months of the vaccination program. Over 90 percent of them were non-serious. VAERS

received a lot of reports of recipients of the 2009 H1N1 vaccine compared to the seasonal influenza vaccine. This may have been due to stimulated reporting.

Death, GBS and anaphylaxis reports after the vaccination were rare. Each was not higher than two per million doses administered. So the adverse event reporting after the 2009 H1N1 vaccine was consistent with that of seasonal influenza vaccines, and you had several groups continuing to do analysis.

On slide four this is one of our recent publications in the American Journal of Obstetrics and Gynecology by Moro and others here again at CDC. The study objective was to characterize reports to VAERS in pregnant women who received seasonal influenza vaccine for potential vaccine safety concerns, and it looked at the long timeframe between July 1990 to June 2009. The message here is that no unusual patterns of pregnancy complications or fatal outcomes were observed in VAERS after the administration of either TIV or the live vaccine.

The next slide is an update on rotavirus – a lot of this has already been presented by Dr. Gruber. I just want to highlight on the last bullet on Australia, they used a historical control and the risk after one dose was significant for Rotateq and not Rotarix. I think that is what I did hear her say, and going to the next slide, the data analysis is going to be continued of Dr. Gruber's data. There is nothing new on this slide except to emphasize that there is going to be continued discussion regarding the signals that we have. And at this time

we have all our colleagues in CDC, industry and Australia providing information to the ACIP.

Next, please. This slide is lifted from one of my colleagues from our office, on Rotateq. Over 33 million doses distributed in the U.S. with a total of over 5,000 reports, about 9 percent have confirmed intussusception – that is about 487 reports of confirmed intussusception and 214 reports are in the 1 to 21 day window after vaccination, and 121 were within the one to seven day window. There are some weak signals there.

In the Rotarix, with fewer people, close to 3 million doses distributed in the U.S., we have received a total of 285 reports, with 32 of them with confirmed intussusception. Fourteen of those reports occurred in the 1 to 21 day window after vaccination; 9 of them were within one to seven days.

So going to the next slide, there is continued surveillance occurring in the 1 to 30 days window, and this is within VSD and all the eight sites in VSD are participating. The exposed population, the children who received any dose of Rotateq with or without other vaccines from the age of four to thirty-four weeks, and the concurrent comparison group are children who are children who received immunizations but no Rotateq from the age 4 to 36 weeks. This is data from 2006 to May 2010. There is some period of delay in getting information from VSD, a lag of a couple of months.

So go to the next slide, which is a summary, is really that the U.S. post-marketing experience in VSD provides no evidence that Rotateq receipt is

associated with any increased risk of intussusception in the one to thirty day or one to seven days following vaccination. And there is limited power to detect a small risk within the seven day window in VSD.

Moving on to the next slide, this slide is again obtained form my colleague presenting this on HPV. It is to remind you about the findings that were published in the paper I shared with you earlier. The main message here is there are no new adverse events for HPV and continued monitoring, including the adverse events listed here on this slide.

The next slide is a slide summarizing HPV data reports in VAERS and outlining the most common adverse events. In October of last year, there was a total of 162 reports. However, these reports, you can see there are few, but some of them, 64 reports coming in a pre-licensure reports and 98 reports that were post-licensure reports. The most common reports in males were dizziness, wrong drug given, syncope. The serious reports were five and they included GBS, severe diarrhea, myocardial infarction, pulmonary embolism, and syncope with seizure-like activity. In females, with the HPV licensed in October 2009, there is insufficient usage to date – only a total of nine reports. And I would emphasize again VAERS reporting does not include causality.

The next slide shows major findings in our VSD that confirmed no significant risk for any of the pre-specified adverse events after vaccination.

Among the outcomes of interest are GBS, seizures, syncope, appendicitis, stroke, VTE and other allergic reactions. There has been no increased rate of

anaphylaxis following HPV vaccine compared to other studies. This study has also found no case of GBS.

The next slide, on next steps, continued monitoring of all the vaccines in both VAERS and VSD and you will receive an update of the continued monitoring. Clearly there has been very little uptake of Cervarix in the U.S.

So going on to slide 14, which is again lifted from one of my colleagues, a little bit of update on safety monitoring for the 2010-2011 influenza season, which as you know includes the strain for the 2009 in the trivalent vaccine. The monitoring systems are again listed here – we are going to use VAERS, we are going to use VSD, we are going to use the real time immunization monitoring system that I once described to you, and it has continued to be used for this season as well. And we are going to rely on the CISA network and we will be using the Vaccine Analytic Unit as well, which also has some of the DataLink monitoring system.

So the high priority conditions that we have enhanced monitoring on will continue enhanced surveillance for GBS, an outcome of concern and we are going to be looking at seizures, based on the Australian experience, we are going to be monitoring seizures up to 8-9. The as I mentioned in the last meeting, narcolepsy was an issue, so we are also monitoring narcolepsy in VAERS and VSD. And we are also concerned with events associated with high dose influenza vaccine. We have a couple of concerns with anaphylaxis. There was a

potential case of anaphylaxis which we listed and most of them were rules out, and we are going to be looking at the high dose influenza vaccine in people 65 years and older.

So then lastly, this is just to let you know that we will be using VAERS again and using the VSD rapid cycle analysis and just to give you a few numbers – we had about 400,000 doses administered of TIV administered in VSD, and just under 50,000 of the live vaccine administered in VSD. At this point we don't see any signals yet, but also there are not many doses. But we will give you the information as we know it.

Thank you.

MS. GALLAGHER: Thank you very much for your report. Do we have any questions from the Commissioners?

MS. BUCK: On your CDC monitoring systems for this season's flu vaccine, what roughly is the size of the population that will be monitored?

DR. GIDUDU: The size of the population that will be monitored?

MS. BUCK: Yes, just a rough guess on the five systems that you will be monitoring, what is the total population?

DR. GIDUDU: VAERS is definitely the entire U.S. population, 305 million people. VSD is the eight sites, which is about 9 million people. The RTIMS is a smaller system, an active surveillance system, which I don't have the number with me, but it's a much, much smaller population. It doesn't cover many people around the area, but it's not including the entire U.S. So that one is a

smaller one. CISA does different things. They look at specialized case assessments of difficult cases, so we only send difficult cases that need expertise to make sense of the cases we have. And also this group is able to get some specimens for their biorepository box. So the CISA system, we send them the cases that they're doing studies for, like GBS and some of the anaphylaxis, and other cases. The Vaccine Analytic Unit looks at DOD. We're looking about I think it's under 2 million active military personnel. That number may be slightly lower, but it's not very many people, but it's a unique population of people in the military, and it is a mainly adult population. Did I answer your question right?

MS. BUCK: Yes, I appreciate that, because I remember that we had greater monitoring for H1N1 and it's helpful to have you remind us of the size of each of these systems and what they are actually monitoring. It seems like we're kind of back to our regular system of VAERS and VSD for the majority of the population, although I do understand that the VAU, the DOD population is fairly sizable. Thank you for that.

DR. GIDUDU: For the H1N1 there was a lot of money. And we really enhanced our systems, even for VAERS. Almost every report got reviewed. So for now we're back to our --

MS. GALLAGHER: I believe Dr. Fisher has a question. No?

Okay. Dr. Salmon?

DR. SALMON: I could just mention there are a couple of other systems that are being used for flu vaccine safety monitoring that aren't CDC

systems, which is probably why they're not mentioned here. But I can just mention them to the group. The VA is going to be doing surveillance as they did for H1N1. And that's an atypical population; they're veterans. Also Indian Health Services, which again is not your average population; it's a minority population. But they've been doing active surveillance.

And then CMS is doing active surveillance for Guillain–Barré syndrome. And that's actually an exceedingly large population, predominantly the elderly. So one of the nice things about the CMS system is that it captures an elderly population, which isn't terribly well -- I mean it's partially represented in these other systems, but that really allows one to look at that population in much greater detail.

MS. GALLAGHER: Thank you. Dr. Gruber.

DR. GRUBER: I just wanted to take 30 seconds to clarify a comment I made earlier on when Sarah asked what the infants in the prelicensure rotavirus trials, what did they get placebo or another active control. They did receive placebo because it's an orally administered vaccine and right now we don't have another licensed oral vaccine for that age range. But I inquired, and so what they received, the little ones, was two milliliter of a buffer solution that contained about one gram of sugar.

MS. GALLAGHER: So it wasn't saline. Thank you for that update.

Thank you, Dr. Gidudu for your report. And I think we'll now move on to Dr.

Salmon and his update from the National Vaccine Program Office. Okay. Well,

Jeff and I are on a different agenda. Okay. Since Jeff put a different set of slides up we're going to hear from Jessica Bernstein on the update on the update on the National Institute of Allergy and Infectious Diseases, National Institutes of Health Vaccine activities.

Agenda Item: Update on the National Institute of Allergy and Infectious Diseases (NIAID), National Institutes of Health (NIH) Vaccine Activities

MS. BERNSTEIN: So I wanted to mention two studies that I'd like to bring to your attention. The first is a study that's just beginning of health outcomes in children with autism and their families. I had sent information via Annie a couple of weeks ago about the stakeholders meeting that's happening tomorrow. And this is a study that's going to explore health outcomes of children with ASD. The goal is to advance the understanding of ASD. And they're using a large database of medical claims to describe basic health and social characteristics of these children and families and compare them with health services with similar children and families who don't have ASD.

So like I said, I sent this out ahead of time in case any

Commissioners are interested and would like to register to either attend in

person, since it happens to be adjacent to this meeting, or on the webinar. And
that's on the slide as well. And here's the information on where it is and how to

register for the webinar.

Also, I put in a draft agenda in your packets.

MS. GALLAGHER: May I read that into, just in case not everybody has this information. There's a stakeholder's meeting on October 29<sup>th</sup> from 2:00 to 4:00 p.m. and it's in the Neuroscience Center, conference room C, 6001 Executive Boulevard, Rockville, Maryland 20852. The webinar is available at <a href="http://dgimeetings.cvent.com/d/ydq5rc/4W">http://dgimeetings.cvent.com/d/ydq5rc/4W</a>.

MS. BERNSTEIN: So also in your packets is a draft agenda for the meeting. So if you are considering going or signing on to the webinar, it will give you a better idea of what's going to be covered. But they are looking for input from stakeholders, including people with ASD, families of children with ASD, and care providers and patient advocates.

So the other study that I wanted to mention was supported by NIH, and it used advanced imaging to chart brain maturity based on functional connections between brain regions. And it's a technique where they use blood oxygen levels to detect correlations between activities in different brain regions. So the technique helped with diagnosing developmental delays and psychiatric disorders that wouldn't necessarily be obvious by structural abnormalities in the brain.

And if you go to the next slide, you can see how -- I mean it literally shows the red connections are those that strengthen with age. The green ones are typically ones that weaken with age. And this technique gave literally a

picture of what's happening in an individuals brain, the idea being that eventually this technique could perhaps serve as something similar to the way pediatricians currently measure weight and height according to a typical curve, and could maybe give an idea of where a particular individuals brain maturity falls in relation to the curve of normal development.

And then the idea is also that it could be another way of diagnosing and monitoring psychiatric and developmental disorders for earlier treatment.

That's it. Do you have any questions?

DR. HERR: I know that there are some people who are claiming to use functional MRI to diagnose attention deficit disorder. But I know that there's a lot of skepticism in that. I mean, is this something trying to add credibility to something like that, or just to expand that idea?

MS. BERNSTEIN: Well, I didn't see ADD specifically referred to in here. So, I think they're looking more at developmental delays and psychiatric -- I guess that could go under psychiatric disorders.

DR. HERR: There are practitioners in many communities that are claiming to use this as a way of diagnosing ADHD.

MS. BERNSTEIN: I don't know. I guess if they're looking at maturity of the brain, you know, it could possibly be -- you could see where that would be related, right? That relates to connections --

DR. HERR: Seems like they're a little ahead of the game at this point?

MS. BERNSTEIN: Yes, they could be.

MS. GALLAGHER: Well, thank you very much for your presentation, and now we'll turn to Dr. Salmon.

## Agenda Item: Update from the National Vaccine Program Office

DR. SALMON: I'll provide an update for you folks on three different areas. And these are topics which I've given you updates on previously. I don't have a lot in any of these, but I'll give you an update nonetheless. The first is the National Vaccine Plan. I know that Ray Strikas has come and given you folks a fairly detailed briefing on the development of the National Vaccine Plan. And in my updates I've mentioned it as well. It's our hope to have that plan ready for the February NVAC meeting. So we're putting the final touches in it and trying to finalize it and hope to get it out very early next year.

So this has been an update to the last National Vaccine Plan. It's gone through extensive development with many agencies and departments within the government, reviewed by RAND, reviewed by the Institute of Medicine, and the National Vaccine Advisory Committee. So it's grand work in progress, which is coming to completion.

The next topic I want to give you an update on is the Vaccine

Safety Working Group. I think the Commission is very familiar with that group, so

I'm not going to go through all of what they're doing, except to say that they're

working hard. We had initially talked about -- the last I updated you on there was the hope that there would be a final report at the February NVAC meeting. It now looks like that won't be ready until the June NVAC meeting. So they are working diligently, and they're making a lot of progress. They have an in-person meeting of the working group scheduled at the end of November, beginning of December. They're planning a stakeholder engagement meeting late winter, early spring, and we anticipate that report coming to the NVAC in June of next year.

The third area I'll just mention to you, and there was some discussion of this with Vito. The Vaccine Safety Risk Assessment Working Group of the NVAC, this is the group that provided ongoing, independent review of all H1N1 safety data. And they are currently working on their end of season analysis. So they've received or are in the process of receiving end of season reports from each of the surveillance systems.

So if you are familiar with how the surveillance system worked there were a lot of programs that did early and ongoing analysis using something called rapid cycle analysis. So, for example, you would calculate the anticipated number of events, or expected number of events, usually from the post seasonal flu vaccine in earlier years.

So, for example, let's say you were looking at Guillain–Barré
Syndrome. You would look at previous years of people that received seasonal
flue vaccine, and the window was one to 42 days. And then you'd calculate an
expected number of cases. And then as the H1N1 vaccine was used, there

would be a weekly or bi-weekly count to see if there was more than expected. So what was nice about this is that it was something that could be done on a very regular basis. And if there were a problem, you would hopefully know about it very soon.

But it's a surveillance tool, and it's not the optimal or the perfect study design. So each of these systems have what they call an end of season analysis. Once all the data come in and they're no longer trying to get things done on a weekly or bi-weekly basis, what is the most rigorous methodological approach to analyze the data.

And that's what's being finalized now ad presented to the H1N1 Vaccine Safety Risk Assessment Working Group. So they're hoping to have their final report in February at the NVAC meeting. I think it's a little bit optimistic, but it may still be possible. They've already gotten the final report from VAERS, from VSD, and from RTIMS, and the remaining programs are reporting to them in November. So they're making a lot of progress, and there's still a fair amount of work to do.

And I think I've shared with this group the comprehensive nature of the safety surveillance monitoring program for H1N1. There is a tremendous amount of data. So to really sort through all of that data rigorously, very carefully and thoroughly, it just takes a little bit of time. But progress is going very nicely.

Vito also mentioned the GBS study that NVPO is coordinating, so I'll just talk about that for a minute more. As we discussed, the 1976 swine flu

vaccine was associated with Guillain–Barré Syndrome, and the IOM concluded that it was a causal relationship, or the evidence favored that it was a causal relationship. Post-'76 the evidence really hasn't been very clear. And when the Institute of Medicine looked at it they concluded the evidence was inadequate to accept or reject a relationship. And if you look at the Vaccine Information Statement or the ACIP recommendations in this regard, -- certainly the ACIP recommendations; I think the Vaccine Information Statements as well -- it basically says if there is a risk, it's in the magnitude of about one in a million. But that's an if because the evidence hasn't been terribly clear.

For H1N1 there was one system, the EIP system, or the Emerging Infections Program, and this was active surveillance for GBS, and about ten different states had a signal for GBS. And when I say signal, it's really defined as something that warrants further investigation. And what they concluded was that if in fact it were real -- and again this is an if, because the data is not conclusive - that the risk would be attributable risk, or absolute access risk, was in the order of about one case of GBS per million doses of vaccine.

As you can imagine, epidemiologically to study something that is -GBS is already really rare. And to study such a small increased risk, it's just very
hard to do. It takes an awful lot of data to get a clear answer on this. So we are
in the process of putting together a protocol that is a meta analysis that combines
data on GBS across all the different systems that collect data on GBS or H1N1.
So it includes VSD, and EIP, and DOD, and CMS. And it's an amazing amount

of people that are under surveillance with all these programs.

We hope to have that protocol completed in the next week or two. It's gone through very, very careful review by all the federal agencies that are running these systems, by academic investigators that developed some of the methods that are being used. So it's almost complete, and it's our hope that within the next 60 to 90 days we'll have the results of that complete. I hate to put a definitive time frame on it because these things sometimes run into delays. But it's making nice progress, and it's been done at the request of the Assistant Secretary for Health, and the analysis is being run by biostatisticians at CDC, FDA, and NIH. So I think at the end of the day we're going to get the best possible answer to this question. And I'll stop there, and I'm happy to answer any questions people might have.

DR. HERR: In the past we talked about how difficult it is the denominator on how many doses are actually given. And we know that still at the end of the year when the season is over and vaccine has returned, the companies get the stuff back. Are we making any inroads at getting a better bottom number?

DR. SALMON: It's a great question. And you're right that often a good denominator is difficult because we know from the manufacturers how many doses go out the door. What we don't know is how many doses go in the arms or however else they're administered, or who they're administered to. In some of the closed systems we have much better data, like the VSD. But in the

case of some, for example, vaccines like flu vaccine, there is vaccine that's delivered outside of the VSD. So even that can be imperfect.

In the case of the H1N1, and for the flu vaccine in general, the analysis that's usually done -- and there's a couple of exceptions to this -- is what's called a self-controlled case series. And what this means is you're comparing the risk of an outcome in one time period versus in another time period among people that got the vaccine only. And the reason that's the analysis that's usually done is because people that get the vaccine are just different than people that don't get the vaccine. And that's especially true for flu vaccine. So this is a methodology that was developed maybe eight years ago, and it's become very widely accepted in vaccine safety, and now it's being used in other domains as well. And the idea is that by using people as their own controls, you've gotten rid of all that bias and confounding that might exist that you really can't measure very well. So I bring this up in relation to your question because, for example, with this GBS study, we don't need a denominator on the number of people that got the vaccine. What we need is cases of GBS among vaccinated people, and then we look at the time window of when that case happened and we compare a 42-day period after vaccination to another time period and we see if you are more likely to have GBS in that earlier time period. I know that sounds really complicated. Did that make sense?

DR. HERR: Sort of. I mean you're trying to compare apples to apples, but if the campaign to increase the immunization rate succeeds, that

becomes less valid, doesn't it?

DR. SALMON: No it doesn't, not in this case. I mean for other types of studies, for other purposes, that could be an issue. But let's take this GBS example again for a minute. If you looked at the '75 vaccine in GBS, which was studied very carefully, and they found that the vast majority of the risk was in the 42-day window after vaccination. And the highest risk window was seven to 21 days. So that's where the access risk was. So if you compare the risk in 42 days after vaccination to another risk window among those people, that's what will tell you whether or not the vaccine was associated with the outcome. There are some things you can't do that for. If there are things that are very dependent on time, or there's a lot of seasonality, it becomes a problem. But for most of the analyses, that's the way it's done.

MS. GALLAGHER: Well, thank you very much. I don't hear any further questions. So now we can move on to the time for public comment. And I'm going to ask the operator to now poll anyone who's on the telephone who wishes to make public comment. But we have one person here in the room who will go first with public comment. So if you could just do that inquiry now, we could have them waiting on the phone next.

## Agenda Item: Public Comment

MS. GALLAGHER: Would you please come up here because we have both the microphone in here, and the phone microphone. If you could

please identify yourself, any affiliation, and speak as loudly and distinctly as you can for those on the phone, we'd appreciate it.

MS. EASTEP: Hi, my name is Rebecca Eastep. I work for SafeMinds. I also have been volunteering for a fantastic organization called Talk About Curing Autism. And you'll have to excuse me, I wrote this statement for Tuesday afternoon with the Special Masters where when I inquired if I could read a statement, they said no, you can only ask questions. And then they said I'd have to come and read a statement here. But then I was reminded that this has to be a statement and you can't ask questions. So I find that a little humorous.

So either way, I'm going to cover some ground in here. And if you can, please remember that I wrote this for the Special Masters for Tuesday. And I spent all day on the Hill yesterday, so I didn't get time to rewrite the statement.

As I said, my name is Rebecca Eastep. My son, Eric, is a petitioner in the Omnibus Autism Program. I attended one week of the Cedillo hearing in 2007 and one week of the Meade and King hearings in 2008. I'm here today to provide you feedback on the Omnibus program from the petitioner's point of view. I'm speaking for my family today, however, I'd like you to know my feelings are very similar to many of the 5,000 families still left in limbo in this program.

My family is just an average American family; we're not radicals or troublemakers. My husband is a Lieutenant Colonel in the Marine Corps

Reserve. Since 2003 he's been to Iraq twice and Afghanistan once. However, his day job is with the Department of Justice. So my family is identical to several

people's families sitting in this audience today. Except there's one major difference: my son had a vaccine reaction and then regressed into autism.

I have been in the autism community for ten years. In fact, I have the Omnibus Program to thank for starting me down the advocacy path. The first parent support meeting I ever arranged was with an attorney who educated parents on their rights in vaccine court. At that time parents had no idea this program existed. And I speculate that's largely still true today.

From the beginning it was obvious to my husband and I that Eric's autism was caused by his childhood vaccines. Raising a toddler with autism is beyond challenging. We spent most of those early years just trying to obtain proper therapies and medical treatments for him, as well as trying to survive his tantrums and sleepless night. We were exhausted most of the time and my husband and I started to lose faith in many of the resources that were supposed to be helping us.

Our pediatricians gave us pearls of wisdom such as spanking our son severely for his tantrums. These same physicians told us that Eric would be institutionalized when he got older. We had no faith in our insurance company as they denied claim after claim, and dealing with our school district was anything but easy.

When I received a call in 2002 from an attorney who explained that parents like myself, had a remedy in federal court, I felt reassured. I began to have a little more faith in our country. Later when I looked up vaccine court on

the Internet I was happy to see the words intended to provide individuals with a swift, flexible, and less adversarial alternative to the often costly and lengthy civil arena of traditional torte litigation. I thought that sounded promising.

As time went on I began to have serious doubts about vaccine court. First, there was no movement in this program for years. I began to question the term swift. In fact, at this point, swift is almost laughable. My son was in preschool when we filed his claim, and he's midway through his middle school career now.

limitations in vaccine court. As most of you know the statute is three years. But it's not three years from the date of autism diagnosis. No, it is three years from the first symptom of a developmental delay recorded in the child's medical record. And get this: the clock starts at the time whether or not the doctor had even mentioned the recording of a symptom to the parents. A simple scribble from a pediatrician of motor delay, question mark, or speech delay, question mark, can start the clock without the parents' knowledge. Since many children do not receive a formal autism diagnosis for years, it is quite possible that their statute ran out before they could ever enroll in the Omnibus Autism Program because they had not received the autism diagnosis in time. The three-year statute is a miscarriage of justice, and hopefully the Cloer decision will change it.

Then I found out the petitioner's attorneys were blocked from using the vaccine safety data to prove their cases. This is beyond belief. Taxpayers

fund that data. The VSD information should be made public for everyone and anyone that wants to see it. It should especially be made available for the attorneys of children who are seeking compensation. If the vaccine program is so safe, why is the data being hidden? Where is the transparency?

As I mentioned before, I attended two weeks of the test case trials. It was at that time I knew less adversarial was also a façade. I watched the DOJ attorneys use ad hominem personal attacks against the petitioner's experts. They drudged up small, professional regulatory technicalities from decades ago to discount the experts, even though there was no jury. Thus it had no bearing on the testimony provided. The respondent's attorneys made being an expert witness for the petitioners as painful as possible, which puts the petitioner's cases in a tough spot. Now experts cannot justify going through a public flogging by participating in this court.

Case in point is Special Master Hasting's decision in Cedillo. He wrote: "After studying the extensive evidence in this case for many months I am convinced that the reports and advice given to the Cedillos by Dr. Kreigsman and some other physicians advising that there was a causal connection between Michelle's MMR vaccination and her chronic conditions have been very wrong. Unfortunately the Cedillos have been misled by physicians who are guilty in my view of gross medical misjudgment."

I couldn't believe my eyes when I read that paragraph. Gross medical misjudgment? Not only is Special Master Hastings, in my opinion, very

wrong about Dr. Kreigsman, but think of the message that was sent to the experts that may have been considering offering their opinion on one of these claims. These people now know that they could be risking their career by helping one of the claimants. Why would any credible expert spend any effort in this court when a Special Master could smear their professional reputations? And surely everyone knows that cases rely on their experts.

Think about the attorneys who may have been considering taking a case to vaccine court. Why would they try a case if they cannot get experts to back up their theories? So not only can petitioners no longer access experts to back up their claim, but these families can no longer find attorneys to try their cases. Ultimately this leads to the legitimate scientific debate of vaccine injury being kept out of the program. I'm beginning to think keeping a legitimate debate out of this court was the ultimate goal.

I must say a few words about Dr. Arthur Kreigsman. In our house Dr. Kreigsman is a saint. Eric had horrible gastrointestinal problems until Dr. Kreigsman treated him. I know with all of my heart Eric would not be mainstream for part of his day if it were not for him. Seeing the professional assassination of Dr. Kreigsman as well as the other experts in the Cedillo decision from a Special Master broke my heart and made me incredibly angry.

However, what I think made me most furious was Special Master

Vowell's statement in the Snyder decision. To refresh memories, Special Master

Vowell wrote: "To conclude that Colton's condition was the result of his MMR

vaccine an objective observer would have to emulate Lewis Carroll's white queen and be able to believe six impossible, or at least highly improbable things before breakfast."

As if it were not heartbreaking enough for families like mine to see these test cases fail, Special Master Vowell made sure that she added insult to injury by making a mockery of our children's experience by comparing it to a work of fiction. I was stunned when I read her words and it demonstrated to me further that bias was there from the beginning in this court.

What I'm about to say may shock some people in this room, but I do not believe every case of autism was caused by vaccines. In my years in the autism community I've met parents that have told me that their child was delayed from the beginning. Guess what? I believe these parents; why would they lie? I also believe the thousands of parents who have described their child's vaccine reaction. I am sure that one day autism will be similar to diabetes with a type I and a type II distinction. I envision type I being classified as classic autism, and type II as regressive autism.

The case this court heard in 2007 and 2008 were, in my opinion, type II regressive. I believe the current epidemic of autism is largely made up of regressive cases. I think these test cases were unsuccessful because you were all thinking these regressive kids should fit the mold of classic kids, and they are most definitely different. So, yes, this court has been a setback for my family. As my husband so succinctly said on the day of the first test case decision, this is a

court where government attorneys defend a government program, using government-funded science, decided by judges who work for the government. Kids like Eric never had a chance. And I'm so glad that ABC, CBS, CNN, the AP and the New York Times, as well as hundreds of other outlets throughout the world picked up that statement. It hit a nerve with many and exposed how unfair this court really is.

However, in no way do the decisions of this court make me give up. It certainly does not make my colleagues stop their advocacy for a safer vaccine program, either. Pharma can keep bankrolling more and more PR campaigns and nonprofit organizations with the vaccines do not cause autism message, but the fact of the matter is that 89 percent of parents rated vaccine safety as their number one health concern according to a study from the University of Michigan from just days ago. Pediatrics reported last March that one in four parents believe that vaccines can cause autism in a healthy child.

Do you want to know why this is happening? Because parents know that causing and resulting in autistic symptoms makes for the same outcome. It's also because on the playgrounds, the schoolyards, the parks, the cul-de-sacs of this country parents are reporting that their healthy child changed after their vaccines. There are so many affected children now that any PR campaign is going to be rendered useless versus the eyewitness accounts of vaccine injury. The nation's parents are losing faith in the vaccine program. That's not the fault of parents like me; that's the fault of the powers that be that

continue to bury their heads in the sand and not respond to this dire situation appropriately.

The CDC reports that one in 110 children now have autism. I hope you all know that rate is 12 years old. It's a statistic from the last century and it's amazing to me that the CDC can pinpoint where tainted eggs are in a matter of days, but yet not be able to give our country an accurate rate of autism. I have a feeling they're sitting on the current number because the true incidence rate is probably so disturbing that the CDC doesn't know what to do or how to spin the news yet.

Needless to say, our country is going to be hit with a tsunami of disabled adults very soon. The Vaccine Compensation Trust will be kept solvent because these 5,000 claimants will never be paid out of that fund. But the government is still going to be responsible for the care of these individuals for the rest of their lives. So in the end are you really out ahead?

Taxpayers are going to have to pick up the tab for these kids. I don't think that's fair. I think the people who made this mess should clean it up, meaning the federal government and the pharmaceutical companies should be grabbing some brooms and mops very soon. Together you can take care of these kids. Pharma may have to forfeit a quarter or two of their billion dollar profits to do so, but so be it, the were the mess makers. And members of the government, you were pretty much duped by the pharma lobbyists when the Vaccine Injury Compensation Act was passed. Please take off your blinders and

recognize the correlation between the expansion of the vaccine program once pharma was assured of liability protection. When those vaccines were added the schedule became bloated, and the autism epidemic was borne.

As mad as I am at this country for wiping it's hands of this tragedy, I think it's ironic that I have more faith in it than you all do. You see, I think if we collectively work together we can take care of the individuals who were harmed and change the vaccine program to make it safer for all people I just wish you all saw it the same way that I do. Until that day comes I'm going to keep advocating, helping families, and lobbying for a better future for the vaccine injured in our country. Thank you.

MS. GALLAGHER: Thank you for your comments. Operator will you please let us know if there is any other public comment indicated on the phones.

OPERATOR: Yes, we do have one. Jim Moody, your line is open.

MR. MOODY: Thank you, Operator, and thank you to members of the committee for the opportunity to give comments. I just have three points concerning the information that was presented today. First I want to begin by following up on Ms. Eastep's comment by reminding everybody that, although the six test cases resulted in negative determinations, the Poling case which was recently settled and compensated was actually scheduled to be tried as one of the test cases. And it was a finding by HRSA, not the court, but a confession by the government that that child's autism was in fact caused by a vaccine. So it's

important to get that story out right and honestly say -- that footnote on the table now I think is extremely misleading and therefore contributes to public doubt.

The vaccines can cause autism; we're just squabbling over the number of cases involved.

Which brings me to my next point that there's a looming crisis about to erupt in vaccine court. We had a briefing down there two days ago by the Special Masters on what to do with the OAP cases. They're beginning the process now of sweeping the cases out of court by sending 30-day notice letters to the pro se petitioners -- there are about 400 of them -- basically saying do you want to continue, and if so you have to come up with an expert to support your theory within 30 days.

As we all know, the science regarding the connection between vaccines and autism is still very much in its infancy. Six of the seven tests cases did not result in positive determinations; the Poling case did. And even the masters at that meeting conceded that new evidence on an existing theory or evidence on a new theory, for example, the connection to mitochondrial would be acceptable.

Therefore, rather than brooming these cases out of the program and potentially risking a flood of cases at the civil court, the best thing to do to protect both the benefits of the vaccine program and public confidence, and to ensure that those who are injured received legitimate compensation is to keep the cases in the program until the science has matured to a point where we can

say with legal and scientific certainty that this particular case was caused by vaccine, or this particular case was not.

Ignorance is not an acceptable solution to this program. The cases should remain parked in the program until the science matures.

The second comment relates to the VISs that were reviewed at the beginning of the meeting today. And I think it's very important that VIS makes clear that the safety information that supports the conclusion that the vaccine in particular is safe, was developed through a study of children clinical trials that were different in characteristics from those to whom the vaccine is proposed to be administered, meaning that you're much, much healthier, as opposed to administering the vaccine to average population, which may be receiving antibiotics, or have sniffles, or have other immune related conditions. And the public should be at least warned that they should interpret the safety data with caution until these postlicensure studies come in with much larger populations, and should be warned that the clinical trials were based on very, very healthy children.

And my third comment relates to transparency with reference to the Banyan Report. The program was set up to rely primarily on a vaccine injury table which lists vaccines, time periods and injuries so that the medical practitioners can be alerted when they're doing their differential diagnoses, the lawyers can be alerted when to look for injuries, and the public can be alerted as to what injuries to look for when considering whether they've suffered a vaccine

injury.

At the time in the early days of the program, 90 percent of the injuries were table cases. Now in part because of the table changes in the mid-90s an in part because of the increase of vaccines, and in part because of the weakness in science, now 90 percent of the cases are off table. Yet many of these cases are settled through concessions, and adjudications, and litigative risk settlements. Thus, we have a growing body not only of table injuries, but let's call it the secret table of injuries, by which those inside the program and those close to the program know what kinds of cases are accepted as injuries, and what kind of claims will be paid, even if it's not a full amount of compensation. That information is being largely hidden from the public. So if there is to be transparency in connection with the Banyan presentation and the web presentations, honestly tell the public what's going on, the secret table of injuries that are actually being compensated, the real workings of the program must be made public so practitioners, the public, and the lawyers in the program can know when an injury has occurred that likely it might be the subject of a compensable claim in the program. Thank you very much.

MS. GALLAGHER: Thank you for your comments. Are there any others, Operator?

OPERATOR: I'm sorry, no, there are not.

## Agenda Item: Future Agenda Items

MS. GALLAGHER: Okay. Thank you. I wanted to now go on to future agenda items and volunteers for the agenda committee for the next meeting. I know that Jeff, and Sarah and Meg were our volunteers last time, so maybe Magda or Tammy or Tom or Tawny would?

MS. CASTRO-LEWIS: I will.

MS. GALLAGHER: Magda, thank you very much for volunteering.

DR. HERR: Sure, I'll serve. That's fine.

MS. GALLAGHER: And Tom, okay. And are you in, Tammy?

MS. TEMPFER: If I'm here I'll do it.

MS. GALLAGHER: Okay. We have an agenda committee. Now, we have standard agenda items. Does anybody right now want to suggest a new agenda item, or should we wait until the agenda committee meets and sort of circulates the first draft? In the meantime you can email me or anybody who's on the agenda committee with any ideas that you have. Should we do it that way?

And I want to, right now, extend my thanks for the entire staff who set up the meeting. Jeff, and in particular Annie and Kay, who I know work very hard every time to make things work seamlessly even though certain people cause technical difficulties for them. So thank you again, for all your help in making this meeting and this process move so smoothly, and it wouldn't without your help.

MS. HOIBERG: Charlene, I would like to go ahead and get the communication workgroup together. I can't even remember who's on that. Tom, you're on it. And Meg, you're on it, and then you two.

MS. GALLAGHER: I had earlier asked Annie to turn her attention to that, and she had nodded yes, and she's nodded yes again because she's such a wonderful person. So she's going to be emailing folks and coming up with dates for proposed --

MS. HOIBERG: I would like to convene before Thanksgiving while things are still fresh in our minds from the meeting.

MS. GALLAGHER: Right. And that's our goal, but I think some of the committee members, you know depending on their availability, we'll try for that, but you know the closest date that everybody is available.

MS. CASTRO-LEWIS: Charlene, I'd like to be on the communications workgroup, too.

MS. GALLAGHER: Okay. So Magda will be added to the communications workgroup. All right. Is there any new business? Barring that, does anybody have a motion?

(Motion to adjourn made, seconded and approved)

(Whereupon, at 4:25 P.M., the meeting was adjourned.)