Full Committee Discussion

DR. TUCKSON: The floor is now open. Let's start with Emily.

DR. WINN-DEEN: Joe, I had a question for you, because I'm concerned that your use of analyte-specific reagents, which my understanding of that, there is a very specific claim made by the manufacturer of an ASR that it is in fact an ASR and it can be used as a component of a home brew test.

My guess is that most of the labs we're concerned about are not buying analyte-specific reagents from a certified GMP manufacturer. They are just going to a regular research supply house and buying the components they need. Does that mean that FDA really doesn't have any control over what is going on there?

DR. HACKETT: It would be the same type of situation. We're not looking at the laboratory offering the services. Only if they were selling that test to another laboratory. So whether they use an ASR or not, or make up their regions entirely in-house, that doesn't make a difference.

DR. WINN-DEEN: So let's just take a concrete example of one of these Internet companies that's offering to test for risk of future development of osteoporosis. If they make up everything completely in-house home brew, does that constitute any kind of an ASR that FDA would be able to regulate?

DR. HACKETT: Not if they do everything in-house.

DR. WINN-DEEN: Okay.

DR. HACKETT: If they buy the reagents outside, then they come into ASR concerns.

DR. WINN-DEEN: So if they buy oligos from XYZ Research Oligo House, does that fall under the FDA?

MS. WOLF: The ASR would. I mean, this is part of the problem. Part of the problem is whether the combination of an ASR that's sold to a lab and what goes on in the lab can be regulated by FDA. The other question is whether the home brew, which is where they do everything, whether that can be regulated.

DR. WINN-DEEN: Right. So my big concern is that most of these folks, ASRs are made in general by legitimate GMP manufacturers who are making them with the knowledge that there is a real medical utility for them.

The places that we are primarily concerned about are doing it totally home brew. They're not actually using any component that's marketed as an ASR. So what can we do to control the proliferation of those kind of assays?

MS. WOLF: That aspect is not my strength actually. I mean, I don't work in the IVD group. I think they probably are in a better position, and we can look into that sort of how widespread that is. I don't know enough about it.

DR. WINN-DEEN: It's very widespread, even in clinical laboratories that are offering legitimate tests. So my guess is that it is there in the ones that are not offering legitimate tests as well.

MS. WOLF: We don't know for sure that none of these tests is legitimate either.

DR. WINN-DEEN: Right. But with the assumption that some of them might not be, my guess is that they're not getting components from a legitimate IVD manufacturer, or GMP manufacturer, I guess.

MS. WOLF: I don't know. We can talk about that at FDA. We can get in touch with you.

DR. TUCKSON: Good.

MS. WOLF: But I don't know how else to answer that question.

DR. TUCKSON: That's good. I think if you can look into that, that would be terrific. We've got Julio, Ed, and Debra.

DR. LICINIO: One comment is that this issue of trying to control something seldom works. If there is a need for something, people will jump through whatever hoop to fill that need. If there is a need for workers in one area, it can put every type of immigration barrier, people will jump and go and get the job.

The situation the way I see it is the taxpayers pay the taxes. The money goes to research. The research is done, the results are published in the scientific literature. Then stories are written and the covers of the New York Times, Time Magazine, anything you open, there is something about the genetic risk for this, for that, for the next thing.

Then you go to the doctor, or you go to like a reputable traditional medical institution and try to get yourself tested. People shrug their shoulders and do nothing. You can talk about like, you know, risk for impulsivity, which there are genes related to that, to novelty-seeking. But I'm not even talking like that.

Let's say in my own area, pharmacogenetics, the oldest thing in the world like cytochrome P450 2E6 metabolites, 50 percent of the best selling drugs in the country. Just under 10 percent of the average Caucasian population has a variant of the gene that has no activity. So people take the drugs.

Well, the same number, 10 percent, have multiple copies of the gene in which you give the drug that metabolizes very fast, and there is no effect. So it is a real concern in the clinic. Some people go to the doctor and they have side effect after side effect, they do have no activity of cytochrome P450 2E6. We've had several patients like that.

The Mayo Clinic is beginning to test for that, so some major medical centers are beginning to do that. But to go to your average like Ivy League medical clinic and you say can I get tested for this in the Costco lab? They say no. If you come up with a test, people have a hard time finding a doctor who can understand that.

We fund the research, we let it be done. The results are there. Some of them are more controversial. Some are not so controversial. People go to the regular health care system. Nobody uses the test, nobody can handle it. If there is a need, they're going to find somebody. They can put every regulation they want in the United States, and people will send the sample to Canada and it will be done in Europe someplace. As long as we say that the issue is important,

advertise the results, and then the traditional health care system cannot handle it at all. There is going to be a gap, and the gap is going to be filled.

I mean, you can regulate it as much as you want. I mean, I'm against people saying send your tests here and will tell if your son is going to become a drug addict. I don't think you can make that kind of claim. So yes, we should watch for blatantly false claims, which I think is what you are very correctly trying to do.

But this kind of marginal or impressionable predisposition risks, as long as we try to justify the funding by saying that the issue is important, then we don't offer people anything. So there is a need, and it's going to be filled.

DR. TUCKSON: Thank you.

Ed?

DR. McCABE: Yes. One of your comments that the FDA is not clearly defining the Internet promotion as labeling or advertising was interesting, I thought.

Is there something that this committee could do, at least in this context, to try and help a decision be made there? Is it such a big issue that we'd be spitting in the ocean for us to do anything?

MS. WOLF: My guess is that it wouldn't be very helpful. I mean, I think this is something that just has a lot to do with FDA's variously evolving attitudes about promotion and how to regulate it. I think it has been an issue for so long, and it is dealt with on a case by case basis a lot of times that you can certainly comment on it.

My guess is that it is not something that is going to get a lot of concrete action.

DR. McCABE: Well, I think that we should write to Secretary Leavitt about direct-to-consumer marketing and make a recommendation to the Secretary that we might wish to include in there this issue that I would certainly, I don't know. Maybe there are people on the committee who would not feel that the Internet is a legitimate source of information. But given how often I use it, every day, I certainly think it is a legitimate source of information. My guess is that it's more powerful than most other media these days for the public. I would hope that we could include at least a sentence or a brief paragraph saying that this should not be an impediment to pursuing these companies.

DR. TUCKSON: One of the things, by the way, that I do hope that the people in line, Debra, Hunt, and James, as you start to question, but also given that we're getting near the 11:30 hour, I want to make sure that you're also doing what Ed did, which is start to formulate what you see as being next steps, if any. I think Ed is starting to try to push some of that together.

Julio had his comments about what we ought not be doing. Just be thinking of action steps as you ask your questions.

Debra?

DR. LEONARD: I would like to just follow up on Emily's comment, because I was a little taken aback by the inclusion of ASRs in this discussion, because I see ASRs as part of the regulatory framework in which laboratories work, set up by the FDA to allow types of testing in a regulated

fashion that are not necessarily able to be brought as PMA or 510(k) approved full device test kits.

I don't think that that is what the committee was asking about or targeting when they were looking at the direct-to-consumer marketing that was being done. I don't know how they are doing their testing, but I doubt it is using ASRs that are manufactured.

MS. WOLF: Well, I think that's, I mean, I think that's what I said we would discuss and get back to you about, right?

DR. TUCKSON: Good. All right.

Hunt?

DR. WILLARD: I wanted to raise another area. I guess my question is whether this falls into the purview of any of the groups that are discussing this, or whether this is just one of those things that Hunt should not worry about, or worry about in his own time.

In addition to the direct-to-consumer marketing for tests for genetic diseases or trait predisposition, there is also a growing number of tests that are much more frivolous in their intent, or they have no intent at all, it is more like sport.

So you can, for example, any member of the public can go out and they can buy for $29.95 a little kit, take a swab, send it off, and get some genotyping done, and/or some sequencing done either, depending on how you read the inserts on these packages, either to be the first in the neighborhood to have a little bit of your genome done, which could be cool in some neighborhoods, or because it actually is sort of telling you something that might be important in a very vague and unstated way.

You can imagine some of these could be for paternity issues, parental issues that come up in some households, or markers that are described that may eventually become linked to some trait predisposition.

This is widespread. A family member of mine tripped over this advertisement on the Target website. I confess I don't spend a lot of time myself going on the Target website. But for $29.95, you can get this.

The question is I guess my concern on why this might be not the best possible testing to be out there, is that most members of the public, not withstanding my desire to have the public think it's cool to have perhaps bits of their genome sequence, they are not prepared to know how to interpret the information either in terms of the genetic makeup of a Y chromosome that's floating around the family, or in terms of mini satellite repeats or trinucleotide repeats.

So they will read something about a genotype of a trinucleotide repeat, and then they see something in the newspaper in which "a trinucleotide repeat expansion has been connected to some disease," and who knows who is connecting the dots between those, even if that's an unintended consequence.
So my question is is anyone looking at this kind of direct-to-consumer marketing? Or is that something we should just let go because there are far bigger fish to try? My concern is that public education is just not at the level where we are quite ready to have potentially millions of

people having a little bit of their genome sequenced or genotyped and have that information in front of them.

MS. WOLF: Well, do you send that tissue to a lab?

DR. WILLARD: Yes. So you send this swab off somewhere, and 3 to 6 weeks later, the test result comes back with a suitable for framing little certificate that says this is what you've got.

DR. HACKETT: Well, that would be continuing our work with FTC, trying to find the slam dunk case, if that would fit in.

MR. DAYNARD: I don't think that's the slam dunk for the FTC. I mean, first you have to decide what is deceptive about it and what the injury is, and how serious the injury is.

I think on our scale, case selection criteria, the case where a test purportedly determines your susceptibility to cancer or something would be far higher on our case selection criteria than that would. But I'm not going to eliminate it if you want to talk further about it.

MS. WOLF: I mean, if you want to send the name of it to us, we can look into it and see what it is. I mean, there are products out there that shouldn't be there. I don't know enough about that one from what you said to know exactly. But I'd be happy to look into it.

DR. WILLARD: It's cleverly marketed as TCAGee, gee as in gee whiz.

DR. TUCKSON: Thank you, Hunt.

James?

DR. EVANS: Thanks. I just wanted to emphasize that when we are talking about tests being obtained some way or another, if they are fairly restricted in the expertise that underlies them, or their availability, that's one thing. But I think we should also remember that the entire advertising oftentimes is to create a need where there hasn't been a need.

While advertisers are certainly able to do that and free to do that, it seems to me that the interest that we have is to make sure that they aren't creating a need that's harmful to people, or using blatant misinformation to mislead an uneducated and unsuspecting public.

I think that perhaps one of the roles of the expertise on this committee can be to try to help find those types of slam dunk cases that are clearly not supported by science that could have potential harm to people, as opposed to those types of advertised types of activities that, well, they are backed up by good science and may not be available.

DR. TUCKSON: Well, let me, as we start in the five minutes that remain to try to sort of see where we come out on this. First is I think that the committee has grappled I think responsibly with our obligation to the public. We are raising this as an issue of concern.

Because of our efforts, we have caused the creation of several task forces within government that are looking to how they can do their job appropriately. We don't want to cause problems in what we're trying to do, we're trying to act appropriately. Finding the right cases where there really is egregious behavior.

Let me ask, because I think one of the recommendations I'm going to make is that we respond back to the Secretary saying that we are gratified that there are these committees formed, these interagency activities, that are ongoing, and that we are aware that they are seeking out appropriate cases for review. We will say in our letter that I'm suggesting that we would say sort of that our members are willing to find or recommend examples that are of particular concern to us from our experience for the committee's consideration.

I wonder whether or not there is any experience with just the fact that you all have targeted an area, just generically, that you've targeted and area and made it widely known that you are looking carefully at bad behavior. Does that in and of itself have a chilling effect on egregious activity? The fact that manufacturers or advertisers know that you are looking to take somebody to the hoop, as it were. Basketball playoffs right now. That you are willing to look at it. Does that start in and of itself have people start to behave a little bit more responsibly? Do you have any experience in that regard?

MR. DAYNARD: The FTC does, but because we are a law enforcement agency, we tread a very fine line between what is appropriate and what isn't. We don't want to chill legitimate businesses from doing their jobs. So typically we have a law enforcement matter that we make public at the same time that we, for example, issue a consumer brochure, a consumer alert saying watch out for this kind of advertising, because the only disease it is going to cure is too much money in your wallet or whatever.

So yes, it does have an effect. For that very reason, we are very cautious about doing that.

DR. TUCKSON: Matt, please finish.

MR. DAYNARD: That's okay. Go ahead.

DR. TUCKSON: No, no. I really like what you're saying. Go ahead.

MR. DAYNARD: Well, I mean, so in some cases, we might issue a brochure. For example, I did in the LASIK area with the American Academy of Ophthalmology a few years ago. We hadn't brought a case yet, but there was a lot of bad advertising going around.

So we issued a brochure saying go into this with your eyes wide open, because there are some problems. You are still going to need reading glasses, and there are side effects. So we did that, and I brought a case later. But it's very unusual for the FTC to do that.

It's possible, and no one other than myself at the Federal Trade Commission has made any official statement about our interest in this area. So we have to be very cautious is all I'm saying.

DR. TUCKSON: I really think that's a very balanced and appropriate statement, Matt.
Deborah, just real quick in terms of FDA. I mean, the same thing I assume.

MS. WOLF: I think with some industries it does, and with others, it probably doesn't. There are times when we have sent 30 letters to the same kind of industry. Companies that were making SARS claims for masks, filter masks, there were about 30 letters sent to these websites.
I don't know how many more were out there. We will take an action against one company, and then that company will send a letter about its competitor two weeks later. So I mean, I think it depends really. I don't think it's consistent.

DR. TUCKSON: All right. Well, one thing I just want to make sure that we do at least is, and I think Matt's point is important. I mean, we are not looking, and that's apropos the comments that Julio made.

I don't think that I would assume that our committee is not looking to chill or have a negative effect on appropriate behavior. What we are just trying to do is to make sure that the public is not being preyed upon by inappropriate people who are attempting to do things to them in an area that has special significance. To the extent that we can make it be known that this is being looked at carefully, I think is important.

Deborah, you wanted to make one more comment?

MS. WOLF: Yes. FDA, in addition to some of the enforcement actions, provides some educational information on the website. I mean, there is an area for hot topics where it talks about breast cancer. We recently, this was a couple of years ago, all of these full body scans that are being advertised where it's not really thought to be necessarily safe and effective, the tradeoff in terms of finding things that may be absolutely benign. In a sense, there is a parallel with some of these genetic tests where you create a need to go get it by advertising it, and should you or should you not really use that information.

What FDA did, because we had authority over the devices, but it wasn't the devices that were being advertised, it was the services. So on FDA's website, we put a discussion about the CT scans, the body scans. I mean, that might be an approach for the committee to look at in terms of public education that FDA can't do by itself. It would be helpful in terms of adding.

DR. TUCKSON: Great.

Matt?

MR. DAYNARD: Yes, I just want to say one more thing. That is that it's possible in this area that what I said we typically don't do, we might in fact want to do here. That is to issue some kind of alert about this area, what is going on, and for consumers to watch out.

But, for example, if we don't find the slam dunk case, or even if we do, issue this brochure or something like that before we do. I can talk to my folks about that.

DR. TUCKSON: All right. Let me just do a process check here. We're three minutes into the time for the next presentation, and lunch is right after that. But this is important, so we've got two hands up. We've got Ed and Kevin.

What is on the table in terms of specific recommendations are, and I'm going to allude from what the group, what they have already said as well. One is short term, and one which is longer term. One is a follow-up letter back to the Secretary saying that we note with interest and approval the committees that are forming, urging them to find the appropriate cases.

Number two, that we ourselves will send to them cases that we are made aware of that may be good examples. So those two are the ones at least now in the letter. Part B of the recommendation I think is, which we cannot discuss in the time we have here, is the idea of public education. We have had that issue on our table before, and I think we are getting to the point where we really need to deal with that. We'll probably have to debate that at some length

later in the meeting today, perhaps squeeze in a few minutes to see whether or not that's appropriate.

But I just wanted to put on the table for my own personal interest is something I think we need to start to talk about.

Matt and Deborah both indicated that perhaps there is a potential of doing something collaboratively with government that sort of gets out useful information for a consumer to use in this area.

Ed, and Kevin.

DR. LEONARD: Reed, you forgot to include defining the Internet as advertising in the letter.

DR. TUCKSON: Terrific. Good for you.

Ed?

DR. McCABE: Well, I would argue that we have heard that there could be increased public education, and that we should include that in the letter. We have heard in testimony before about the misleading advertising that's there. We could go back to that to document it. So I think we should encourage increased education about this issue.

The other thing, and this is a question to Matt and Deborah. We all work better with deadlines. Would it be helpful to you also in the letter to recommend that the task force get back to us by some point in time? Would that help you, or would it be damaging?

MR. DAYNARD: It would be damaging for me, I'm afraid to say, just because this is the new area. Although I'm happy to work under deadlines, the folks I'm responsible to don't when they haven't gotten a heads up from anybody else. It's not a good thing right here, I don't think.

DR. TUCKSON: Would you mind, though, because of the interest on this on the committee, and even if you have to, you have given yourself sort of a pass there, but we would like to at least get an update at the next October meeting as to where things are.

MR. DAYNARD: Absolutely. Absolutely.

DR. TUCKSON: Thank you. That would be the way to do it.

Kevin, last comment.

DR. FITZGERALD: Yes, just a quick question on this public education piece. I'm glad to hear that you have the information on your website. Has anybody in your organization done a check to see if you Google or use some other search engine, these particular genetic diseases or a particular idea about finding genetic genealogies or whatever, that your website comes up in the search engines?

Can we look to see what possibilities there might be in cooperation with search engines to make sure that these websites come up? Because the information is there, and I think it should be getting to the public.

MS. WOLF: I can check into that. I know FDA's website gets a lot of hits. I mean, it gets millions of hits. So the public is aware of it, and that it has information. On that specific issue, I can find out.

DR. TUCKSON: Great. Matthew and Deborah, I want to just really, really thank you. You have done your jobs very well. Muin, thank you again, also. This interconnection, I mean, I just feel like for the committee's sake, whether or not somebody wants to write that we're moving at a glacial pace or not, because of what we've done, we've caused people to move on this issue. It is clearly in the minds of agencies that have extraordinary clout, and also though have a responsibility to proceed appropriately and carefully and cautiously so that they do no harm.

I think that's what we're hearing here. So I think this is a good outcome. I think we are moving forward, and clearly you can expect that we'll ask you back for our meeting. We've got a few recommendations, which we'll summarize at the end of the day to move forward.

With that, let me from a process check announce that we'll be five minutes over 12 for lunch, so I'm sorry.

DR. FITZGERALD: Just one other thing on that. Considering the rapid decrease in the size of glaciers around the world, I took it as actually a compliment.

(Laughter.)

DR. TUCKSON: A true scientist thinking about things. We're going to be five minutes over 12:00 for lunch, so we'll build that in.