**Presentation of Public Comments and Proposed Modifications to Draft Report on the Policy Issues Associated with Undertaking a Large U.S. Population Cohort Project on Genes, Environment and Disease**
***Huntington F. Willard, Ph.D.***

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DR. WILLARD: Thank you, Reed. Good morning, everyone. I apologize for missing yesterday, but one's day job occasionally gets in the way.

To Reed's point of this being a five-hour marathon to discuss this, I would point out what my students always tell me, which is that there's no penalty for finishing early. So if we reach consensus, so much the better and we can move on to other business.

So what I'd like to do today is to give a little bit of background on where we are with the large population study report of the task force, which hopefully will become the report of the committee, for the benefit of some new members of the committee and the folks watching us at home, as they say, and then quickly get to some of the substantive changes that have been integrated into the report by the task force after what actually was a very extensive and useful process of getting public comments which were dutifully collated and considered by the group.

It was a yeoman's effort, as this whole thing has been, by staff, particularly Yvette Seger, who has been tireless in pulling all of this together and keeping most of us on task.

Let me move forward without any other delay. For those who are new to this, the issue at hand is to examine issues relevant to a possible United States large population study which we define in this report as an approach to learning more about relationships among genes, the environment, and common disease. And the goals of the studies, both ones ongoing and ones planned both in this country and elsewhere, are to determine mechanisms underlying common complex diseases to inform treatment and prevention strategies and ultimately, of course, to improve health in this country and elsewhere.

So the purpose of this session is to review the public comment process and the comments themselves and to go through the changes that have been introduced into the draft report as a result of those comments, as well as a few other changes and, hopefully shortly after lunch, to get to a point where we have reached a consensus among the committee and we can finalize and thus approve our report for submission to the Secretary shortly after the new year. Goals are good and hopefully we'll achieve that, and I think we can.

So what I want to do is to summarize the major revisions that have gone into the draft report since last we met, and then after I introduce all of those, I'll sit down and we'll be able to go through more on a point-by-point basis the different sections of the report, ultimately the recommendations that the task force has come up with and that this committee has seen in draft form at a previous meeting, and then address the question at the bottom of this slide in terms of readiness of the report for submission to the Secretary.

Let me acknowledge the members of the task force. This list is more complete than the one that you have in front of you. So you should look at the screen, if you will. There are some new members to SACGHS and thus new members to our task force: Barbara Burns McGrath and Steve Teutsch. Others are old veterans whose involvement in this task force and on the phone calls that I'll describe in a moment was really a remarkable commitment I think to this process of trying to work with the public comments to take them seriously and integrate those comments

into the report. The ex officios on the right side of the slide also were critical and really make this, I think, a broad-based task force draft which we're bringing to the full committee here.

So because we were all much younger when this process started, it's worth, I think, going through some of the events in history that led up to the report that we now have in front of us.

We were first contacted three and a half years ago by NIH, invited to weigh in on the value of a possible large population study. Coincident with that, our own prior-setting process that we went through for a number of meetings in 2004 listed the issue of a large population cohort study or project as one of those issues that required in-depth consideration. Thus, accordingly, in October of 2004, the task force that I just described was formed.

We had sessions in 2005 at the March and June meetings, and the draft report was begun in June 2005 under guidance from the NIH Director that I'll be more explicit about in a moment.

We had more presentations at our October 2005 meeting. You all saw the first draft of the report at our March meeting. That was the draft that then was sent out for public comment in May, June, and July of this current year.

Those public comments were then collated by staff and considered by task force members in two quite extensive teleconference calls in September and October, which leads us to today with a revised draft, hopefully the final draft report, which we'll consider today and hopefully approve with whatever modifications we decide we need in order to achieve consensus.

So it's worth pointing out, I think, the specific request from Director Zerhouni regarding what our committee was being asked to do and, perhaps equally importantly, what our committee was being asked not to do.

So we were asked to identify the key policy issues related to a potential large population study and specifically those policy issues that should be addressed before undertaking such a project.

We were asked to outline the approaches that could be used to address the issues that were identified, but specifically we were urged not to address the issues themselves. We were to outline the issues. We were to describe processes that the Secretary might put in play in order to address those particular issues, but we weren't being asked as a group to address those issues ourselves.

Lastly, we were to recommend mechanisms that might best be used to address those identified issues. This is very much in the spirit of the draft report that you have in front of you in order to keep with the request from Dr. Zerhouni.

What we weren't asked to do was to come to a conclusion about whether or not a large population project should move forward in the United States. That, of course, is the 900-pound gorilla sitting in the corner. On the other hand, we're essentially remaining silent on this issue, and I'll describe that particular point a little more thoroughly as we're going through the draft report. So the final report that you have in front of you has the intent of appearing to be -- and you all will have to decide the extent to which we've succeeded in this -- entirely neutral on this question, simply to say that it is an open question of whether a large population study should go forward. And in order for the Secretary and others to address that question, there are a number of issues that ought to be tackled first. There are other issues that might only be tackled after such a decision has been reached. But here are those issues and here are some of the mechanisms that

might be used in order to address those issues. So that's the position we've tried to take as a task force in coming up with the final draft that you have in front of you in order to maintain the type of neutrality that I believe we were urged to do.

So what I'm going to do now is to go into some of the public comments, the process, as well as the specific comments themselves, leading up to the final draft report that you have in front of you. Then I'll sit down and we'll roll up our sleeves and begin to go through the specifics of those changes and the specific recommendations.

So as I just said previously, the draft report was released for its 60-day public comment period at the end of May of this year, and that period ended at the end of July, this past summer. The report was posted on the SACGHS website. There was a substantial targeted email outreach to a variety of different groups. There was media outreach via the NIH Office of Communication. It was posted in the Federal Register and in the NIH Guides for Grants and Contracts. And then there was a "Dear Colleague" email that was sent out to a whole variety of listservs. In total, about 48,000 individuals were informed that the draft report was ready to be viewed and commented upon, and I think we have every reason to be confident that anyone who was interested in it then knew about it from at least one, if not multiple, sources and, thus, had an opportunity to offer their comments.

From that list of 48,000 -- obviously, many people were busy -- 69 returned comments, but those were, as you'll see in a moment, very substantial sets of comments and very useful. There is a summary in tab 7 of your briefing book that goes through literally in summary form. Then you were sent to your home offices this booklet, which some of you brought but many of you may not have, which is a compendium of all of those comments and makes for enlightening reading, if anyone is interested.

There really were some very salient comments and, more importantly perhaps, some very consistent comments that came through repeatedly from very different kinds of groups, and those were the ones that I think we felt especially that we were either not clear in our intent in the draft report or made us wish to provide more background information, as I'll describe shortly.

So the 69 comments that we received represent a number of different sectors that had received notice of the draft report. And the vast majority, about 60 percent, of the comments came from three groups highlighted on this slide: about 25 from academically based researchers, as one might expect; 19 percent from professional societies. There was a typical Macintosh to PC handoff glitch here. That's the professional societies that should be boxed at the bottom, not the individual box. And then various government agencies provided 17 percent. So those three groups, academically based researchers, the government, and professional societies, offered about 60 percent of the comments that came in, and then a variety of other constituencies and sectors made up the remaining portion.

So even though there were only 69 individual comments, many of them were quite comprehensive, and there were a total of about 600 comments that address specific issues somewhere in the draft report. The wonderful staff developed a coding system which was developed to categorize the comments into the four major policy issue categories that we had already decided on when we viewed the original draft, as well as public engagement, and those comments were then viewed within each of those kinds of categories.

Various of the task force members, usually two if not three, were assigned to each one of those sort of bins of comments in order to go through those and analyze them individually in terms of

whether they were particularly substantive that we needed to address, whether they were requests for clarification, or whether they were someone who just misread what we said or what we intended to say, in which case a little bit of word-tweaking perhaps was sufficient. But those task force members then identified the major themes that came through those piles of comments and decided on the comments to be incorporated, as we discussed in full during two teleconference calls in September and October of this year.

And so it's those comments, integrated and discussed as part of what probably was another five hours' worth of telephone conversations among a fairly large group of people to decide exactly which changes should be made, how we ought to make those changes, and how we can best position the draft report that you have in front of you.

So there were some major themes from the public comments that I want to go through because I think it gives you a sense of how the report might have shifted from the original draft report that you saw to the final draft report that you've had for the last week or so.

One of the major comments was that the tone of the original draft report was decidedly not neutral, that most people read our draft to say that we were very much behind this, and in fact, to some people's reading, it appeared it was a foregone conclusion that this was going to go forward and we were simply providing guidance on how it might go forward. Accordingly then, the role of SACGHS and the charge that we received clearly hadn't been understood, and that was our fault. We just hadn't laid that out as clearly as it needed to be.

So the task force decided both to clarify explicitly what our charge had been, along the similar kind of points that I made a number of slides back in introducing these changes. And then we went through carefully in order to examine the tone of the report and make sure that we, in fact, were being neutral in our language and making sure that we were covering essentially all points of view that might be relevant to the Secretary as he reaches a decision on a possible large population study.

Another major theme was that more information needed to be included on the already-existing cohort studies of various sizes and shapes that are already being funded by HHS and other groups both in this country and elsewhere. And more information needed to be included on the types of interdisciplinary research that would be necessary to mount a large population study. And those changes have been made and we'll go through the details of those changes in a bit.

A number of comments pointed out that we had not sufficiently addressed issues of socioeconomic status and economic factors that were relevant to how costly and what kinds of issues would be relevant to a large population study. So sections on those have been introduced into the final draft that you have in front of you.

We were urged to expand our discussion of what is obviously a series of complex ethical, privacy, and confidentiality issues that we perhaps gave short shrift in the original report. And that section has now been significantly expanded, and we'll describe that in a moment.

There were specific suggestions among the public comments that the task force thought were quite good in terms of mechanisms for greater ethical and independent ethical insight that would be necessary for a large population study, were one to go forward.

Then lastly, we were urged to be clearer on the extent to which that public engagement was being emphasized. So we made a significant rearrangement within the report, not so much the content,

but a rearrangement in order to provide what we think is a more appropriate emphasis on the importance of public engagement both before a decision is reached and after, should such a large population study go forward.

So that, in a nutshell, is the essence of the major changes and the processes that have gone on since last we viewed the draft report. I'll stop at this point if there are any questions specifically about what I've presented thus far, and if not, then I'll move back to my seat and, as I said, we'll roll up our sleeves and begin to go through some of the specific changes with an eye towards not wordsmithing per se, because none of us will live long enough to get through it if we do that, but rather to reach a consensus that the changes that the task force made are appropriate or not appropriate, deal with major issues of language and text where there are some major issues, but move our way through to reach a consensus on what the final report should look like. And then we'll go into the recommendations both that the committee saw last time and that the task force has, in a few cases, modified.

So any points or questions at this point before we move on?

(No response.)

DR. WILLARD: Great.

Since I'm sitting where I'm sitting, if the people in the left field seats, if you're waving your arms and I don't see you, just do something a little less polite than waving your arms and we'll go from there.

So throughout everything I'm going to present now, I'm referring to line numbers, rather than page numbers, since the draft report is organized in that way. So you can follow along in your hymnal, if you want to, as we go through this.

So the major revisions in terms of the overall organization that I just alluded o were that previously there had been two different sections on public engagement and the importance of public engagement. One was in the beginning and one was at the end. Obviously that, in terms of the public comments, failed to convey the importance that we attached to this particular issue. So we have now integrated that into a single chapter within the report which hopefully improves, as this says, the logical flow of the report, eliminates some redundancy, and increases the emphasis for any reader, including the Secretary. So the content hasn't changed very much. It simply is merging those two sections and putting them together so that it has more emphasis.

The other major revisions are in terms of the tone of the report. We've made a significant effort to change the language to be more neutral and balanced in response to the public comments. In the spirit of the request from the NIH Director to raise issues for exploration and not to either endorse or discourage efforts to pursue a large population study, we've attempted to go through this, because of these public comments, and change language, most of which has been relatively modest changes in words simply to reflect this neutral perspective, the example here being that we would say such a study would do something as opposed to the study will do something, which is the type of language we had before that many of the public commenters responded to. So for those of you who have read through it or do read through it on the fly, you'll see many examples of that as we go through.

So the introduction. The introduction has been significantly expanded and I think clarified in response to the public comments. First of all, more background has been added on the role of SACGHS and the specific charge related to this report.

We provided more background information related to the Design Considerations report that had come out from the NIH, principally from the NHGRI-led effort to examine design considerations. That's now summarized in an extensive section.

And then there's an overview of the public comment process and the type of input we received from various stakeholders, all within that introductory section.

So any comments on the introductory section?

(No response.)

DR. WILLARD: Seeing no waving arms, we'll move from there.

The second section, the second chapter is on the scientific background. Some of you will recall that began in the previous draft with an immediate description of the International HapMap Project with sort of glossing over the Human Genome Project. The task force felt that even though the Human Genome Project is ancient history now, it's not that much ancient history, and so perhaps it warranted some discussion and we have included that now before description of the International HapMap Project.

And then in response to public comments, we very substantially expanded the section on already existing cohort studies in the United States, listing them and going through with a brief description of each of the ones that we were aware of and included. That was a very consistent comment from a number of the public comments, and so we introduced that change as well.

Any discussion on either of those two changes?

(No response.)

DR. WILLARD: Either the caffeine hasn't kicked in or we're on a roll. This is good.

The third chapter. Now we get into the meat in terms of the various policy issues, in terms of overview changes. We first expanded a section beginning at line 931 entitled "Capacity to Conduct Interdisciplinary Science," incorporating a number of concepts that were raised by the public commenters, and then we specifically mentioned two of the existing cohort studies, the Women's Health Initiative and the National Children's Study, as potential models of the kind of interdisciplinary research that would be needed in a large population study.

Then a little bit later, there's an expanded section on the need for partnerships to address a recurring theme in the public comments about the wide range of stakeholders and the potential for a large number of different potential partners to lead this large population study, were the decision made to go forward.

And then there's an expanded section on access to data and materials, beginning at line 1037, again incorporating concepts raised by the public comments that the task force members felt were important.

Then lastly under "Research Policy Issues," we added a section on the recently announced -- and I believe later this afternoon we'll hear more information on this on the NIH Genome-Wide Association Studies Initiative. We included that.

Then in what I think what the task force felt was an important addition, to expand the discussion of what we meant or what people who consider large population studies mean by the word "environment." Previously this was a small footnote in the introduction, and we felt and public commenters felt that that was not providing suitable emphasis to this. So that was pulled into the main text and we incorporated significant feedback from public comments to make sure that we had a broad and workable operational definition of "environment."

Yes.

DR. AMOS: You have in here biological factors. Is that environment? Physiology? Is that the innate physiology of the individuals? Is that really environment?

DR. WILLARD: Now you're making me remember who on the task force had raised that issue.

I think it relates to in infectious disease, for example, that the infectious agents are biological on the one hand, as well as --

DR. AMOS: Okay. So the way it's written, when you say physiology, it implies the innate physiology of a person that is a reflection of their genetic makeup, obviously.

DR. WILLARD: But the task force felt it was also a reflection of the environment.

DR. AMOS: Sure.

DR. WILLARD: So it's the output of the combination.

DR. AMOS: I'm just saying you may need to explain it a little better in the way that you actually meant it.

DR. WILLARD: Okay. We'll flag that and give a more extensive example under "e.g."

Any other points on this? Because this actually is an important change in terms of the balance of the report. Joseph?

DR. TELFAIR: On the task force, we actually had an extensive discussion on this set of issues related to the environment. One of the reasons why it's a little broad was it was a deliberate effort to leave it broad because in a lot of the public comments, the specificity was leading in one direction, but besides asking us to explain it more, the point was made that we actually did not provide any kind of breadth to the discussion. So that was one part.

The other part was, as Hunt has said before, that we wanted to make sure that we provided at least some examples that could actually be used when the decisionmaking process came along too.

So being a little bit broad was actually a deliberate effort, if I remember correctly from our discussions, because they were extensive. And the other committee members could chime in on this.

DR. WILLARD: Yes. As the report says, this actually is an issue which would presumably have to be discussed. So we are, in a sense, suggesting that this lands in the Secretary's lap or NIH's lap or any other group's lap in order to determine what, in the context of a large population study, is meant by "environment." We know what genes mean, but it's less clear what we mean by the environment.

DR. KOVACS: I just wanted to say I applaud the task force for looking at the breadth. So I think it's very good to think broadly here.

But I do agree with Michael that if you look at all the other factors, they're clearly external. And if you look at physiology and say, well, there are genetic underpinnings of physiology, it's a little bit different from the other. So that's a good point.

DR. WILLARD: We'll flesh that out. Thank you. That was useful.

Yes, Barbara?

DR. McGRATH: I had two thoughts. One was under the second bullet about capturing diversity, adding geographic diversity to the recruitment strategies.

And then under the social factors at the bottom of the half a dozen bullets, gender is not included there, and that was one comment from public comments that I think we might have missed. And I would add my own of cultural under social.

DR. WILLARD: And you think gender should be added as well as a social factor, as opposed to sex which is obviously not environmental. You're making that distinction? Am I reading that correctly?

DR. McGRATH: Yes.

DR. WILLARD: Other comments on this particular point?

(No response.)

DR. WILLARD: Thank you.

So that is the research logistics section and the changes that were made there. Sorry. That was research policy. Now we're into research logistics. That's the second area.

In this area, we again changed the definition of the environment and pulled it up into the text for clarity and expanded the section on recruitment and enrollment, adding information both that came from a report by Charles Rotimi to this committee and added another section on socioeconomic and lifestyle factors which was not in the previous one.

Also under research logistics, we added a section on multidisciplinary research teams, repeating the theme that we also hit on earlier, and then added a section on coordination across multiple institutions and healthcare systems, beginning at about 1355, again in response to public comments.

Any questions on research logistics and those changes?

(No response.)

DR. WILLARD: The third area is regulatory and ethical issues. We significantly expanded the section on privacy and confidentiality and incorporated a number of comments which we received from the World Privacy Forum, as well as a number of other comments from some of the other commenters, and addressed specifically the need for a privacy officer which needs consideration, the need of a privacy impact assessment, third-party use of project records, and identifiability. So, in essence, this section is now going through in more detail the kinds of issues that would fall under privacy and confidentiality, which both from a public standpoint, as well as stakeholders who might be involved in such a project, are obviously critical ones.

Also, under regulatory and ethical issues and, again, in response to a theme among the public comments received about the need for ethical oversight, we added the suggestion of an independent ethics review committee. That becomes a recommendation of the task force, which we'll describe as we go through all of the specific recommendations. But the text for this begins at 1760 to 1789. But that is new text, and so it's worth everyone considering that.

So discussion or questions on any of the changes under regulatory and ethical issues?

(No response.)

DR. WILLARD: Thank you.

The fourth area, which actually is an integration of what had been the fourth and the fifth areas, is now entitled "Public Health, Social, and Economic Implications." It's a merger of what had been public health and social sections separately. We've added to that integration of those two previously separate sections language on the potential economic impact of a large population study, as well as, of course, as I just said, adding the word "economic" to the title of this section.

Relevant to the social implications is adding a text box to emphasize our previously announced support for and continuing support for the genetic nondiscrimination legislation, lest the Secretary lose focus on that particular issue, which we keep reminding him of. So that box reflects again both population comments in the sense that were one to consider going ahead with a large population study, the kind of legislation already proposed under the federal Genetic Nondiscrimination Act would need to be in place for a large population study to go forward. The task force felt that it would be unlikely that there would be public support for such a study in the absence of nondiscrimination legislation. So that's now described in this section.

Questions on that point or on this section? Jim?

DR. EVANS: Yes. I was just wondering. From the standpoint of economic impact -- and maybe it's elsewhere -- discussions of the kind of balance with regard to the costs and economic impact on existing research endeavors, et cetera. So this describes the economic stimulus that might result. Are issues addressed that many have concerns about regarding --

DR. WILLARD: You mean the cost of the project per se?

DR. EVANS: The cost of the project and its impact on the research infrastructure.

DR. WILLARD: That's in an earlier section I believe. There is a section somewhere, Jim, and I'm trying to remember where it is where the cost of the project and its impact on the rest of the biomedical research enterprise is discussed. But I think we'll flag that and, if nothing else, in this section --

DR. TELFAIR: Line 2007.

PARTICIPANT: Page 66.

DR. WILLARD: I'm hearing two different things here.

DR. WILLARD: Page 66? We don't have a page 66.

DR. TELFAIR: It's line 2007 as part of that discussion.

DR. EVANS: Yes, and page 25.

DR. WILLARD: So it may be that it's worth -- because what was discussed in the beginning, the $3 billion figure, which is in the paragraph that begins on line 913 -- that paragraph we might refer back to in the later section so there is a balance of the two economic issues. Good point. Thank you, Jim.

Any other points on this? Barbara?

DR. McGRATH: Did we pass by line 1894, health disparities section? Sorry. Maybe I'm a little slow.

DR. WILLARD: 1894? Is that what you said?

DR. McGRATH: Yes, the section on health disparities.

I'm still a little uncomfortable with that because I think most people, when they think about a large population study, feel that it would detract money from health disparity research, which mostly is social and economic and environmental factors. I think there's something to be said for the research, and this could contribute to that. Maybe some acknowledgement that there is that tension between the competition for funds in the areas of health disparity research that might be addressed more directly. Do you know what I mean?

DR. WILLARD: Do any other committee members have an opinion on that point? There's certainly no harm in pointing out that kind of tension, if that's a widely perceived --

DR. FITZGERALD: I agree with you, Barbara, in the sense I think it actually will add to the amount of research that could come out of it. Is that what you're saying? You want a flag in here that this, in fact, could be an impetus for increasing that social research. Right? Because we have to look at the ramifications of the project, and in doing so, that should lead to additional research, ELSI research, in that area.

DR. McGRATH: I actually don't know, but I think most people, which is a dangerous beginning of a sentence, feel that research in the genetics area pulls money away from old-fashioned public health researchers looking at health disparities in terms of social determinants of health. Here we're sort of just jumping to the middle of the argument by saying it will, indeed, increase our

knowledge of social disparities. And, indeed, it might, but I think there's a perception on the other side more strongly. So if we really feel that it might contribute to understanding health disparities better, maybe address that tension a little more directly, because I think it's kind of down-played in here, and it sort of opens itself to criticism I think.

DR. WILLARD: I think I understand the point now.

Sylvia?

MS. AU: I don't know though, Barb, because the public comments -- we're trying to respond to public comments and evidence that we have. And I don't think that that's something that's been expressed in the public comments or in any evidence that we've received, that they think that it might decrease funding. I mean, it might decrease funding in all areas of research because if you're going to put a lot of funding into a large population study, across the board they might decrease research. So I don't know if we should add something into a report where we don't have some evidence for it or we haven't received strong public comment on that issue.

DR. WILLARD: Other opinions on this point? Joseph?

DR. TELFAIR: I think I understand. This actually came up in our conversation. It came up in a general discussion regarding if this goes forward, how will it affect looking at funding in similar type of areas. My understanding was that the wisdom of the task force was to highlight, in as much of a diplomatic way as possible, the issue itself and knowing that it probably will come back to be reviewed. It wasn't a perception that what you're discussing and that your perception is off-base. It was just that it was looked at in the context of concerns across the board of similar types of work, particularly in the social and behavioral sciences where this type of research would play a role.

So I think it was felt very strongly and put forth that this whole section be included to begin to at least have the dialogue but provide some basis for discussion and decisionmaking and to kind of leave it at that. I think some of us tried to push a little bit harder for more, but I think it was the wisdom of the group to try to leave it at this level.

I do have a comment. Actually, it's a correction in one of the lines.

DR. WILLARD: Before we leave this point, and then I'll come back to you, Joseph --

DR. TELFAIR: I just wanted to let you know.

DR. WILLARD: -- I think what we could do, Barbara, and I'll make this proposal to the committee, is that in that paragraph on page 25, when we are discussing the impact of a large population study on the funding of other biomedical research, that we expand that to flesh out what we mean by biomedical research to include behavioral research, health disparities research, et cetera, and make it clear that we're not just narrowly talking about what we often mean by biomedical research because that's the appropriate place. I think that's very much consistent with the general sense that we had before.

DR. McGRATH: Great. That makes sense.

DR. WILLARD: All right. Joseph, over to you.

DR. TELFAIR: Thank you. I have two corrections, if I can. It's on line 1914.

DR. WILLARD: Yes.

DR. TELFAIR: It should say "socially defined."

Then on line 1921, at the end of the sentence, it should stick with vulnerable groups because you have racial/ethnic groups, and if you look at the examples you're giving, those are both social and other groups as well. So sticking to vulnerable groups.

DR. WILLARD: You mean drop the word "historical"?

DR. TELFAIR: No, no, no. At the end of the second sentence, where you said these included racial/ethnic groups, and then you list a number of groups. Some are socially defined. Some are not. But all of them are not ethnic and racial groups. The second sentence.

DR. WILLARD: Yes, but I'm not reading that sentence to suggest that the women, gay, and lesbians are social and ethnic.

DR. TELFAIR: I'm sorry. What? No, no, no. I'm saying that these are racial, ethnic, and socially defined groups. I mean, what I'm saying is that the way you define the groups is not correct.

DR. WILLARD: I don't think we are defining them in that sentence. So what's the exact correction you would have us make?

DR. TELFAIR: All I was just saying is that you should stick with "vulnerable" because that better defines the groups. That's all I'm saying.

DR. WILLARD: So you want to delete the second sentence?

DR. TELFAIR: No. What I'm saying is you should include groups such as and then keep the rest of the sentence as is.

DR. WILLARD: So drop out the "racial/ethnic."

DR. TELFAIR: Yes.

DR. WILLARD: You want to delete that.

DR. TELFAIR: Yes, sir.

DR. WILLARD: Okay.

DR. HANS: Don't you have concerns, Joseph, that some others reading that would feel that there is a glaring omission?

DR. TELFAIR: Yes. I think whenever these sentences and stuff that we have done before, whenever you've written things this way, people have always said, well, there are other groups that would go here, et cetera. And it's more straightforward, if this is an example, to have it that

way. But just in experiences that we've had in putting reports like this together, people have always said something is left out or something is included that shouldn't be there.

DR. WILLARD: But if I'm following you correctly, you're proposing to leave out racially and ethnically defined groups.

DR. EVANS: We wouldn't want to leave out a historically vulnerable group. Right?

DR. TELFAIR: No. Never mind. No. Forget I said it.

DR. WILLARD: I don't want to forget what you said. I want to make sure everyone agrees.

DR. TELFAIR: I realize now what's being said, and I guess I was reading it slightly differently than that because I was trying to read it from another lens. But I'm fine with that part. But I will stick to my earlier comment, though.

DR. WILLARD: Changing the word "culturally" to "socially."

DR. TELFAIR: Yes.

DR. WILLARD: That seems appropriate from my vantage point.

Other points? Kevin?

DR. FITZGERALD: I just have a question. As you mentioned, because of the public comments, we're highlighting the genetic nondiscrimination legislation. But in the table of contents, it isn't flagged, and I imagine there are going to be quite a few people -- the first thing they're going to look for in the table of contents is where is that addressed. Is that intended to be in the table of contents somehow?

DR. WILLARD: We can certainly take a look at that.

DR. FITZGERALD: Yes, because I know some people are going to immediately go to that and want to know where that is in the report.

DR. WILLARD: I'm taking this as a sign that we're actually pretty close to consensus when we're worried about the table of contents.

(Laughter.)

DR. WILLARD: Anand?

DR. PAREKH: I like the discussion on the economic impacts, and clearly the paragraphs highlight the importance of looking into the potential economic costs of this large population study. Did the task force feel that there should be an actual recommendation to the Secretary that there should be some kind of independent body or something that could provide some estimates of how costly such a population study might be to provide some kind of basis for resource allocation to ultimately make a decision?

DR. WILLARD: Well, we certainly didn't make a specific recommendation to that point. I think when we go through the recommendations that we've drafted, let's sort of look for opportunities

where that would be covered. Clearly, someone has to come up with an estimate as part of any process to go forward or not. So that's the intent. We didn't single that out as one particular recommendation that said put a price tag on this. But as we go through the recommendations, I think that's a point.

Sherrie?

DR. HANS: I was just going to comment that in the task force discussions, actually the question of whether that discussion should be included in the report at all -- sorry. My comment was specifically in response to your question. In the task force discussion, there was a great deal of debate about whether that discussion should even be included in the report. So there was certainly not overwhelming support for its inclusion at all. So the question of a recommendation then I think is one that is worth a great deal of discussion.

DR. WILLARD: Other comments on this section? Joseph?

DR. TELFAIR: Just a point of order, if I can. The reason why I just sort of stopped the conversation on my point is that I think it will take a little longer discussion. I was wondering if I could indulge a little bit of your time to explain a little bit more and see whether it's relevant or not.

DR. WILLARD: We're doing well. So, please, go ahead.

DR. TELFAIR: No, no, no. I don't want to take up the committee's time. Trust me. It's a little bit broader expansion, and I want to make sure that when I make the recommendation, in terms of wording, that it is correct because I just don't have the wording right now.

DR. WILLARD: Yes. I think we all know what we want to say. We just want to make sure the words are not subject to misinterpretation by some other reader.

DR. TELFAIR: That's correct.

DR. WILLARD: So it's an issue of clarity of language more than the actual intent.

DR. TELFAIR: Okay, thank you. I appreciate your indulgence.

DR. WILLARD: Anything else on public health, social, and economic implications?

(No response.)

DR. WILLARD: The final chapter is on public engagement which, as I said previously, merges what had been two separate sections in the original draft specifically here. Then we've now added a section on one example of public engagement, the Moderated Focus Groups and the National Children's Study. We've added a section on the Public Consultation Initiative recently funded by NHGRI to describe that project. And then we've added a section based on recent survey data based on the presentation that was made to this committee. That's all now in this section.

Comments or questions about what this section is doing?

(No response.)

DR. WILLARD: So that takes care of the text. Now we have what, I'm sure, will be a little less easy and straightforward, and that's to actually look at the specific recommendations themselves. As a sort of preamble to this, let me say that what I think we're looking for is to achieve consensus on what the committee would like to recommend and move to consideration of approval of that content. If there's specific language that some of the committee feels needs to be improved or is unclear or is inappropriate or what have you, this is the time for us to do that. Minor wordsmithing of change this word to that word and this section and add a comma here, that kind of thing we can deal with outside of the context of a committee meeting and just do that by sharing information by email with Yvette and Sarah. But I do want to make sure we get to a consensus here on the intent of these recommendations so we all go away with a sense of what it is that we're all recommending.

So there are now 18 recommendations in the report. These are what were previously called "options" which the task force felt, from the original draft, was sort of a weak word and not particularly responsive to the NIH Director's request that we actually make some recommendations. So we now have 18 recommendations divided into the different sections, as you see on the slide, and then one beginning, overarching recommendation that the task force felt was necessary in order to put into context all the subsequent recommendations.

Now, this table that is on the screen and you have in front of you, I think, is fairly important because it really makes two points. The first point is the vast majority of what we're about to look at you've seen before. Most of these recommendations are essentially unchanged except for some minor wordsmithing from a version which we all saw before and largely stood behind. But there are three specific recommendations here that are either entirely new or substantially new wording, and those we'll want to take a closer look at as we go through this.

You have in your packets two documents that are relevant to this. One is called "Public Comment Draft Versus Final Draft: Changes in Recommendations." That sort of gives you the Reader's Digest abridged version of the changes that I'll be describing.

You also have another sheet that's called "Revised Final Draft" that replaces page 31 in the report. There was one recommendation that was left out by pure glitch on our part, and this now puts that back into your report. I'll give it to you on the slide as we go through. So you're not going to be missing it there, but just so you have a page that you can substitute into the final draft in front of you.

So I'm going to propose to go through all 18 of these recommendations, spending most of our time, I suspect, on the three that are totally or substantially new and probably less time with the ones that we've all seen and supported before. But, obviously, I want to invite comment and potential changes if members of the committee feel that we should do that.

So the first new recommendation is this overarching principal recommendation that the task force felt needed to be in place in order to put all of the subsequent recommendations into context and to allow them to be presented with some clarity about what we intended.

Some of these recommendations overall are for issues that the Secretary would need to address prior to making a decision about a large population study. Other recommendations wouldn't need to be addressed at all unless there were a decision to go forward with a large population study. And this recommendation is intended to sort of provide the context that would tie those two different types of recommendations into place.
So let me read this, not that you're not capable of reading yourselves, but let me read it anyway.

This recommendation reads: "As part of the process for determining whether to undertake such a large-scale research project -- and prior to a decision being made -- the Secretary should initiate a thorough consideration of the full range of policy issues outlined in this report. The Secretary should consult and engage the full range of potential partners for such a project during this decisionmaking process, including the public at large, the full scientific community, a wide spectrum of government agencies, and the private sector."

So this recommendation intends to make two points: one, that this entire group of policy issues needs to be addressed prior to a decision being made, that it would be inconsistent with the fact that these issues are being raised and that there are processes that one would need to go through in order to address those issues to sort of make a decision about a large population study absent a thorough consideration of those issues; and then secondly, that as part of doing that, that there was, in fact, a very broad range of potential partners in the public and the government and the private sector. And the task force felt it was important to sort of articulate that within this recommendation.

So let me open it up then to the committee, both those on the task force and not on the task force, for their input. Emily first.

DR. WINN-DEEN: Well, I just noticed, if you look ahead on your slides to recommendation number 2, that you state that we should also consult with Congress to get their buy-in basically, but that consultation is left out of this overarching recommendation.

DR. WILLARD: Because they're not an agency you mean.

DR. WINN-DEEN: Right. So I don't know if you want to think about putting them somehow into this because they definitely would have to appropriate funding for it, and you would want to engage them early on as well.

DR. WILLARD: So you're suggesting that the advice of the committee would be that not just as part of the appropriations package, but as part of actually deciding whether to go forward or not, that you would bring --

DR. WINN-DEEN: Right. I think if you don't have buy-in from Congress, that you're not likely to get the funding that you need, and you want to get that buy-in early. Or you at least want to educate them that this is coming, why it's coming, what the rationale is, and keep them informed about this whole pre-decision process so that when the decision happens, it's not a surprise to the guys that have to write the check.

DR. WILLARD: Right. So without worrying about how we would actually word that, do other members of the committee have an opinion on that point? Sylvia?

MS. AU: Let's just add policymakers to the list. That includes state level, local level, federal level.

DR. WILLARD: Without specifying Congress per se.

MS. AU: Yes.

DR. WILLARD: I see a red light down there. Yes.

MR. DANNENFELSER: I'm thinking maybe at the beginning of this overarching recommendation, we should say as part of the process for determining whether to recommend that Congress undertake or recommend to Congress the undertaking of such a large project, something to that effect, that you put Congress in there, but that the Secretary do all the other outreach in order to decide whether to make that recommendation to Congress because I think he needs to make a strong case to Congress in order to do that. He probably does want to get Congress involved at some point, but I think that it does perhaps make sense to get Congress up there in that overarching recommendation at that point.

DR. WILLARD: I have Reed and then Joseph.

DR. TUCKSON: Yes. I want to be careful I don't open up a Pandora's box here. You did allude earlier in your early comment about the tone and to make it neutral. So clearly, you all have wrestled with this. This is a neutral statement. So there is no way that anyone can read this that I can see that shows the committee has any particular interest in doing this. It just reads that if you decide to go play in traffic, look both ways and don't get hit, as opposed to go play in traffic.

I just want to make absolutely sure that we have no intention to be pushing as to whether this is actually a good idea to do with the appropriate caveats as we are going to describe in great detail.

DR. WILLARD: That's an invitation to the committee to address that point. I think the sense of the task force was that until one had the answer on a number of those issues and knew what the answer was, that we wouldn't want to necessarily recommend either for or against a large population study until we had all the data in.

DR. TUCKSON: Let me just ask it this way then. And I'm being careful here, extremely careful I hope. But what I'm saying is that there must be some reason why you would want to have all these things done because, at the end of the day, there is some potential that this might be a reasonable thing, a good thing, if all these caveats were checked off.

So what I'm sort of wondering again is the subcommittee saying -- it's hard to tell whether you're being dragged, kicking and screaming, into this recommendation to do all these things or this actually could be good and it's important to do all work, or let's don't do this thing and I'm going to show you a whole lot of work you've got to do before we even think about it. It's like which way are we coming.

DR. WILLARD: Kevin, I saw your light.

DR. FITZGERALD: Now I'm completely confused by Reed.

(Laughter.)

DR. FITZGERALD: I thought we were on the same page, and I'm not sure now anymore. But I think the idea was to be completely, if that's at all possible, as neutral as possible on this. And I guess I'm still now trying to see -- are you saying that this isn't neutral? Are you reading this as non-neutral?

DR. TUCKSON: I'm saying if I am a person from outside of this, I could read in any which direction I wanted. So you're right. If you want to be absolutely neutral, this is a neutral as you can be. You can't determine whether you are interested -- I'm asking. I don't think you can determine whether this committee is saying that this kind of a large population study is actually a

reasonable thing to try to aspire to if it meets certain tests, or this isn't a very good thing, but if you're going to be so unwise as to pursue it, you need to meet these tests. I can't tell which way. Are you part of the group, I guess, that is saying this large population study is actually a good thing for the country under certain conditions or it's not? I just don't know how people will read it.

DR. FITZGERALD: I think that's all right.

DR. WILLARD: Jim?

DR. EVANS: Well, my feeling is that is all right. I like the neutrality of it, and I think that for those people who are interested in looking at the more nuanced take, the report does lay out clearly I think in the prose that if certain conditions are met, this could be a good thing, but there are caveats. I think to come across in the overarching recommendation in a partisan way is probably exceeding our mandate. I like the neutrality.

DR. WILLARD: Emily?

DR. WINN-DEEN: I'm just listening to this dialogue and I think what I'm hearing is does this committee want to make a recommendation that at least the funding to explore whether this is a good thing should be coming forward in terms of moving to the next level of decisionmaking. Is that really what the committee is interested in recommending, that at least that much investment be made by the government to determine if this is a good thing to move forward.

DR. WILLARD: But isn't that what the recommendation says? It says, "The Secretary should initiate a thorough consideration of the full range of policy issues outlined in this report."

DR. WINN-DEEN: Right.

DR. WILLARD: You can't do that for free.

DR. WINN-DEEN: So to Reed's point, it's not exactly neutral from that point of view because it is recommending, at least to some extent, an investment of government dollars in the exploration, you know, phase I or phase 0, whatever, of the project.

DR. FITZGERALD: I would argue that, in fact, that's what makes it neutral because if you don't recommend the initiation of a thorough consideration, you are, in fact, making a decision because without a thorough consideration, this doesn't go forward. So the idea is in order to achieve that neutrality, you really have to understand what's involved in choosing either to do or not do this because there are consequences either way. And you can't really know those consequences unless you do this thorough consideration. So I think that was built into our idea of how one does achieve a sort of neutral position on this because you have to say we can't answer this question until we do a good consideration of it.

DR. WILLARD: I have Alan.

DR. GUTTMACHER: If I understand Reed correctly, which I think I do, I would agree with him. I would think that, for instance, we might put something in here because the potential benefits to health of such a study are so great but the issues underlying it are so complex, that there should be this kind of -- I mean, this group has spent a lot of time and has a lot of expertise, has gotten a lot of community input. To come out and just say absolutely nothing, I think

personally, is not benefitting the American public to the degree of -- without saying, you know, go out waving flags and say go do this. Unless we say, you know, there really is something here, then it may fall under the weight of here's some large, sort of bureaucratic report that says there are 18 different ways of looking at this, et cetera.

I think earlier, several meetings ago, we had sort of a hands-up show around the table, and there was a fair bit of excitement, et cetera, of the group for the potential of this kind of thing, understanding that there are many reasons why maybe it should never go forward, but that it had real potential. I think somehow that has been lost as we've gone through all of these changes, and I think overall, the changes have been good. They've added some depth. They've added some nuance. But I think we still at some point need to say there's a reason for thinking about all of this.

DR. WILLARD: Point heard, although I do recall that the public comments were pushing us to be completely neutral, and so that's what we've tried to do. Now, the committee can, obviously, decide differently today.

DR. GUTTMACHER: Not all the public comments said that and the public comments did not represent the vast majority of the American people, et cetera. I think we need to record the public comments. We need to take them into consideration, but I think it is this committee forgetting its duty to just say, well, gee, whatever happens to come across the transom, we'll take sort of the general consensus of those comments and just make that the report.

DR. WILLARD: Other comments? Yes.

MR. DANNENFELSER: Looking again at this language and prior to a decision being made, I think that perhaps subtly that helps reinforce the point that Reed is making, that that sounds extra-cautionary almost to have that language in there. In a way it almost looks a little bit condescending that you're saying to the Secretary -- you're already saying you should initiate this process, but prior to a decision being made -- I mean, I think that's kind of a given that you would go through this process before making a decision. And I'm just wondering if that language would come across almost a little condescending towards the Secretary.

DR. WILLARD: I think the intent was not to be condescending.

(Laughter.)

DR. WILLARD: The intent was to anticipate that one perhaps reasonable response would be to go ahead and start a small-scale sort of first phase of the project itself, while simultaneously going through all these other issues. And the task force, at least, felt that, no, that probably wasn't the right way to do it, that in fact, the issues needed to be addressed first before initiating or considering initiation of a project. So if there's another way to word that -- if it appears condescending to one person around the table, chances are it appears condescending to others.

Yes.

DR. AMOS: I'm just wondering. I actually think the overarching recommendation is really good. You're just saying, look, go figure out whether it makes sense to do this or not and then move forward.

But I was wondering, you know, like the Senate does, when they're not ready to put money into it, they create a statement of the sense of the Senate. So could we as a group put a statement in here somewhere in the preamble or introduction as the sense of the committee? Is that appropriate?

DR. WILLARD: Well, recall a slide that I showed very early on today which is that we were specifically asked not to say, yes, we should go forward or, no, we should not go forward. We were asked to simply outline the issues that are relevant to appropriate people making that decision.

DR. AMOS: Well, maybe it could be in a separate document. I'm hearing people say that this is something that the committee has sort of shown hands before and said we should do it. Just an idea.

DR. WILLARD: Well, we have to know what "it" is before the committee could reasonably decide that that was appropriate or not.

Jim.

DR. EVANS: I'm going back to the slide that very specifically says what we were not asked to do, and we were not asked to come to a conclusion about whether this should move forward. If I understand our charge right, it would violate our mandate to do so. And moreover, I don't think we're qualified to decide that. We were asked a very specific task.

I think this neutral statement is very good, and I think the nuance is supplied with the rest of the report. I guess certainly it wouldn't change the tone to remove the hyphenated clause because, as part of the process for determining whether to undertake such a large-scale research project does, indeed, imply that that would be done prior to a decision being made. So some degree of wordsmithing might be appropriate for this overarching recommendation, and I don't think it would be unreasonable to get rid of that if people find that somewhat insulting or condescending. But I like the neutrality of this.

DR. WILLARD: I've got Joseph, and then Reed, and then Kevin.

DR. TELFAIR: I think it's important -- and the rest of the task force can correct me on this -- the order in which the overarching statement was written. It was one of the last things that was done after a full review of all the work that had been done. That's where it was coming from. It was in light of what we can and cannot do, given what we have already done. I think it's important that those that are reading this, even though it's first, to realize that it came pretty much at the end of a very long, very arduous review process that took into account many, many things.

I say this more for clarity and to not reinforce because, you know, a sense of this -- and I guess in my neck of the woods we call it the wimp factor -- there is that did we or did we not wuss out on this. I think it's critical for us to know that the committee worked really hard to come to this point. I think it's important for people to realize that where this overarching comment was is more of an introduction, and I think taking a real good look at this set of recommendations to me will answer a lot of the questions that people are bringing up and a lot of concerns people are bringing up. It won't answer everything because those things don't, but I would suggest not to say move forward, but I just want to put it in perspective.

DR. WILLARD: Kevin?

DR. FITZGERALD: I guess, too, what I would like to make sure doesn't get lost, as we wrestle with this, is the sense that I don't think the task force or this committee would recommend to the Secretary to initiate a thorough consideration of something if we didn't think there was potential benefit there. I mean, why would one bother? So, obviously, the more rigor one decides a topic is worth investigating, the greater potential that topic must have. Otherwise, why bother?

So I think inherent in this, from a perspective, one could read that there's a great deal of interest, there's a great deal of possibility for this sort of thing. I don't think we need to overstate then. I understand one can look at this from a variety of perspectives, but that's the whole point of the neutrality in a sense or the openness in a sense of this statement, that people coming from a variety of agendas can read into it what they want and also all see that it's either too optimistic or it's too pessimistic. And I think we would get that from this reading.

DR. WILLARD: Reed, I apologize for skipping you before.

DR. TUCKSON: I'm actually glad you did. I wouldn't have missed that for the world.

(Laughter.)

DR. TUCKSON: Kevin, I was with you all the way till just like when you jumped off the bridge, but I was right there holding your hand. I think, though, that you were speaking very specifically to Michael's legislative history point, which I think is actually pretty right on target there.

First of all, I think this is such a contentious issue that we do, I think, deserve to be clear to people about where we are. I mean, I think the wuss factor, Joe, is absolutely right there. It's not fair to the people participating in this debate to not be very clear.

I think that the legislative intent that Kevin said is right there. And if everybody agrees to that, which is why would anyone ask the Secretary to spend money and all the trouble of going through this if this did not have the potential for promise -- so, in other words, if you thought that this was the dumbest idea known to man, you would say, stop now, screw it, and go do something else worthy. And if that is the sense -- because I need to know how to represent your sentiment in external bodies. So I've got to be really clear that I know how to speak for you.

So if that is what you are saying, then I think people need to sort of acknowledge that through our committee chairman that we are saying that it has the potential, therefore, do all of these caveats. And that's as far as we're prepared to go. But I need to be real clear that that's what you are saying. I will take off my moderator role, neutral role, and say as a member of the committee, I am voting but more than prepared to submit to consensus that that is, in fact, what we are saying. I am urging some degree of clarity that says this is important enough to let's get at it and figure this thing out.

DR. WILLARD: I've got two people in the queue, but let me remind people this is simply a recommendation. This is not our grand statement of final conclusion. This is simply a recommendation that one needs in order to make sense of the other recommendations. There will be an executive summary. There will be a conclusion that hasn't even been written yet.

So I think there's plenty of room for language if in fact we want to say something similar to what Alan was addressing earlier, which is that there seems to be enormous potential for terrific things to come out with respect to both science and health. That is in the text itself and presumably there are ways of pulling that out into the executive summary and conclusions without it being in

a recommendation like this which already is contorted English language. I'm not sure I'd want to make it any worse than it is.

So I've got Robinsue and then I have Alan.

DR. FROHBOESE: I'm just curious at the outset to find out the task force's thinking behind recommending that the Secretary undertake this extensive process as opposed to SAC's serving in its advisory capacity to actually collect the information from the various sources. I'm wondering what the mechanism is for the Secretary to go out and to get this wide public input as opposed to this being a continuing function of SAC.

DR. WILLARD: I think the task force was responding to Dr. Zerhouni's charge which specifically said identify the issues but don't make an effort to actually address those issues. So that's what we were told to do. Now, if the Secretary wants to receive whatever recommendations we agree on and then come back to us and say, great, now chapter 2, we want you guys to tackle the following five issues and give us some feedback on that, then that becomes the second round. But I think we were simply responding to what Dr. Zerhouni was requesting of us. At least, that's my sense of where we were.

Alan, you're next.

DR. GUTTMACHER: Yes. I just want to quickly associate myself with Hunt and Reed's comments and maybe comfort Jim and help rescue Kevin from his bridge jump.

(Laughter.)

DR. GUTTMACHER: I was not trying to suggest that the committee come to any conclusion that this study should go forward. Again, I agree very much that not necessarily it should be here, but it should be someplace, that the committee has considered this and sees enough potential.

My concern is, I think, what Kevin expressed, that one can look at this now and see whatever you want to see in it. And I don't believe that the committee, having looked at it a lot and thought a lot about it, completely comes out, well, you can see whatever you want to see in it. We can see that there's lots of complexity, but there's enough promise here. That's why I just think someplace in our verbiage we need to make that point.

DR. WILLARD: Okay.

So before moving on from this recommendation, I want to specifically ask for a sense regarding the phrase, "and prior to a decision being made." The fact that it's bolded -- it's not bolded in your original documents -- has nothing to do with anything. But if, as Jim suggested, we could just as easily remove that phrase and not lose anything, then I think the committee should make itself heard on that point so we can decide what the final should be. So maybe even just a straw vote, kind of show of hands, of how many would like that phrase removed.

(Show of hands.)

DR. WILLARD: That looks like slightly more than 50 percent.

Anyone feel strongly that it should be there, must be there?
(No response.)

DR. WILLARD: That's a good sense of the committee. I thank you. So that is the overarching recommendation that sets the tone for all the others that come subsequently.

So under research policy, this is the first of the recommendations. It's essentially unchanged from what it was in the previous draft. "The Secretary should continue to promote and facilitate ongoing consultation with the public, the international community, and the private sector to explore opportunities for collaboration."

That didn't seem contentious last time. Would anyone like to --

DR. WINN-DEEN: So it just seems like you left off the end of the sentence. If people are going to read the recommendations in isolation, it should be opportunities for collaboration on large population studies. It seems like you sort of left the sentence hanging, to me.

DR. WILLARD: Okay. That's wordsmithing. In a sense, you're right. There will be a list of recommendations that will be read by some people absent text and even absent executive summary. So each should stand alone.

What's being pointed out to me is that in your text -- and this is why it may be difficult to view recommendations as standalone text -- the lead-in to all of the recommendations under research policy is if a decision is made to move forward, the following considerations should be addressed. So this is a recommendation that has no bearing whatsoever if a decision is made to not bother to go forward for whatever reason.

Now, we could take that lead-in phrase and have the be a starting phrase for each of these recommendations. The task force sort of got tired of that. It makes it, obviously, repetitive to have that in every single one of them, but that's obviously the intent.

DR. TUCKSON: I think, Hunt, the only thing you've got to be concerned about is, obviously, we all know that what people read is the recommendations. Even though you're a Nobel laureate writer, the people will focus on the recommendations. Having still said that, you'll make everyone numb by doing that.

DR. WILLARD: So that's recommendation 1. I'm seeing no particular objections.

Recommendation 2 we also have seen before in essentially unchanged language. "The Secretary, in consultation with relevant HHS agencies and appropriate Congressional committees, should ensure that there is widespread support for sustaining a long-term and stable investment in a large population" study. So I'm going to change the last word, given we've always called it a large population study, not a project. So that word should be changed. But with that change, Barbara?

DR. McGRATH: I'm loathe to belabor this point, but after the discussion about the neutrality of language, I just wonder about the word "ensure." It jumps out to me. I wonder if we inserted the word "assess" instead of "ensure," whether it has a different feel to it.

DR. WILLARD: "Should assess whether there is"?

DR. McGRATH: Yes.
DR. WILLARD: I think the sense of the committee was there's no point in going forward with large population study unless there is some guarantee, to the extent that there ever is a guarantee,

for ongoing funding for government programs, that someone has at least realized that this is not just, you know, sequence the human genome and then the last bill is in and you're done. This actually has ongoing support that is necessary in order to benefit from what might emerge from a large population study. So that was the sense of the task force, and obviously, there may be other ways of phrasing that, but that was the sense.

MS. BERRY: Couldn't we just say to capture what Barbara is saying because I agree with her that the Secretary should do all this to ensure there's wide support prior to moving forward with the project. I realize we just had that lead-in discussion, and so we don't want to be redundant there. But that would just kind of nail the point home that before moving forward or before making a decision, he'll look at everything and make sure that there's the support. So it's not concluding that there definitely will be such a study. How we wordsmith that so we don't have all these repetitive phrases, lead-in's and tail phrases, I'll leave that to others to draft.

DR. WILLARD: I mean, that was the task force's concern, that the value of a large population study is the follow-up clinical work with patients every four years for two decades, or whatever the proposal might end up actually being. Therefore, that means you better have some funding that somebody is thinking of stretching forward for two decades.

Alan?

DR. GUTTMACHER: Yes, I think that's right. I think these are both correct points, but they're two different ones in a way. One is that in the run-up, you don't want to do this if there's not popular support for it. On the other hand, once you have launched into it, it would be a waste of money, in fact, to sort of do it halfway. So if it is really going to be launched, well, after that happens, then it is necessary that leadership, i.e., the Secretary, continue to support this to make sure that it is done in a way that really gives results that are worth doing, rather than just sort of going halfway and say, gee, well, we enrolled people, we can stop now.

DR. WILLARD: Yes. It is a longitudinal study, after all.

So what of this issue of the word "ensure" versus "assess whether"? I'm lip-reading to leave it as it is.

DR. FERREIRA-GONZALEZ: I think we need to leave that as it is. This is a very key point. If the Secretary is going to move forward, there has got to be enough funding because you cannot make an initial investment of millions and millions of dollars and just get short at the end when we're starting to see some of the benefits of this.

Here and I think through the entire document, we don't want to start continually saying, if you decide to do this. I mean, this has to be an overarching recommendation that whatever you decide. But we cannot in each individual recommendation start putting some language to make sure that we go back to the same thing.

DR. WILLARD: I think we have consensus on that, and it will take a little bit of wordsmithing back at the home office.

The third recommendation, again, one you've seen in a previous iteration. "Given the trans-disciplinary nature," which is the third different way we've expressed that, and elsewhere in the document it's "inter" or "multi." Now it's "trans." That may be something we want to harmonize. "Given the transdisciplinary nature of its scope, the Secretary may wish to establish a highly

collaborative model of project leadership and management in multiple HHS and non-HHS agencies and with other stakeholders, including," et cetera.

The essence of this recommendation is the first half. It just simply says, "may wish to consider" and "establish a highly collaborative model," as opposed to a project like the Human Genome Project that was run essentially by the NIH and DOE in a joint partnership or something that was done just strictly by one body.

Any points on this one? Yes, Jim.

DR. EVANS: Yes. I'm not sure where to bring this up. So tell me if this comment belongs more aptly somewhere else.

But this is very broad, and I think that at some point, perhaps in the overt recommendations, perhaps in the text that underlies them, it's worth stressing certain things that have emerged during the deliberations that could really facilitate such a project. What I'm getting to is the collaborative model with, for example, the VA. There are models out there -- and I think the VA is probably the best one -- that offer tremendous advantages to doing much of the work of something like this, you know, the electronic medical record, lack of fragmentation of the health care system, really good representation of minorities, et cetera.

I think that it's worth highlighting in some way in our recommendations -- and I don't know if in these very broad ones, it's the right place -- that there are certain avenues towards getting something like this done that has great promise to overcome some of the difficulties inherent in our health care system that present obstacles. So, again, I'm not sure exactly where that should go, but I wanted to make sure to get that out there so it's somewhere.

DR. WILLARD: Is it your sense that this needs to be in a recommendation as opposed to the text that supports and leads up to a recommendation?

DR. EVANS: Yes. One could even consider going halfway and saying that there are specific models -- you know, refer to text -- that provide the promise of surmounting some of the obstacles. So I don't know how far you have to go in the overall recommendations because I think these are appropriately intended to be rather broad at kind of the 30,000-foot level. But I'd just throw that out there for consideration because as we've deliberated it, it seems to me that there are huge advantages to certain specific collaborations, in my mind, most saliently the VA model.

DR. WILLARD: Other points? Cindy?

MS. BERRY: Very minor, but I was just wondering if we were just trying to be very polite when we use the word "may" wish, and we didn't use it elsewhere. And if we don't need to be that polite, then maybe we should consider just saying --

DR. WILLARD: "Should"?

MS. BERRY: -- "the Secretary should consider establishing." But if there's a reason why we're being polite, I'm all for it, but I just thought I would raise that.
DR. WILLARD: I don't think that language was chosen for any particular reason. So we can certainly -- we're nothing, if not polite. Yes.

Yes.

MR. DANNENFELSER: I'm just wondering whether we should be referring to a highly collaborative model of project involvement as opposed to project management if we'll be seen as trying to micromanage how the Secretary proposes to manage the project, if you will, that there might be something to be said for somebody being in charge, rather than running the risk of it being too diffuse that ultimately somebody is taking the lead on it, but that there are very many agencies involved that we want to collaborate with.

DR. HANS: I think the language of this came from looking at other large population studies around the world and how they have constructed their overall governance of those large population studies. Many of them have both a scientific advisory board or scientific governance board. Most have some kind of public consultation governance board, and a number of them also have an ethics board.

So it sort of speaks to the implications of the governance, not the responsibility. So if you were to think of the scientific advisory board, I think we were trying to say that that board shouldn't just be geneticists, but should have a broader representation in the governance of the project.

MR. DANNENFELSER: No, I'm not objecting to that point. I think that we certainly want to advocate that there's a very broad spectrum of people that need to be involved. But I think, in terms of the Secretary's management style and the administration in general, there's a very strong emphasis on accountability, and that somebody should ultimately be in charge and should be ultimately accountable for the management of the project, even though there will be many partners in the project, that somebody in particular needs to ultimately be responsible.

DR. WILLARD: I don't think the task force would disagree with that, but the intent of this language was not suggest that it would be a committee of five who would sit there without somebody being in charge.

Chira?

MS. CHIN: Just to address that, we actually had talked about this before. We don't know who actually will be in charge of this, and we kind of just wanted to leave it open to find out who actually is going to be doing that.

DR. WILLARD: Yes. That was clearly the intent. Okay, that's recommendation number 3.

Recommendation number 4. "The Secretary, in consultation with relevant HHS agencies, should ensure that there are opportunities available to the general scientific community to be informed about the potential for such a project, to present its views about the scientific validity and feasibility of such a project, and to present its views on the commitment of resources to such an effort, including whether there are benefits to leveraging existing" cohorts, "and to provide input on issues related to fair access by scientists to the project resources and the sharing of data and samples collected within it."

This covers a lot, but the recommendation essentially is make this as open as possible and make sure you pull in all those in the scientific community who might be interested at every step. That's my sort of vernacular description of what's written here as a recommendation.

Comments on this?

(No response.)

DR. WILLARD: And the final recommendation under research policy, recommendation number 5, which we've seen before. "The Secretary should require that there are clear intellectual property policies in place for discoveries made using the data and samples collected to ensure public benefits."

That was a point of emphasis we had before, and some public comments came in on that as well to make sure that those policies are there.

Any comments on this one?

(No response.)

DR. WILLARD: What a committee. That's research policy.

Then we have four recommendations under research logistics. The first of these, "The Secretary should encourage project leadership and the scientific community to develop clear, consistent definitions and parameters for the stratification and classification of the projected sample population to ensure diversity and appropriate representation in the population to be studied."

I don't think this is controversial for anyone. As I say, we've seen this one before.

(No response.)

DR. WILLARD: Okay, hearing no comments, we'll go on to recommendation 2. "The Secretary should seek input from the public, as well as researchers and clinicians, on the best approaches to identifying subpopulations for recruitment and on approaching, educating, and enrolling various subpopulations. Project organizers should be encouraged to consult with community- based organizations as part of their recruitment and enrollment strategies." Okay, that's number 2.

Yes, Sherrie?

DR. HANS: I did wonder, just to capture some of the sense later on that we get to in the public consultation, whether this should say something like "as part of their recruitment and enrollment assessment and strategies," so that it's not just seen as a strategic approach, but it really is truly an engagement portion as well. So add the word "assessment," "assessment and enrollment strategies."

DR. WILLARD: Okay.

Anything else on this one?

(No response.)

DR. WILLARD: Recommendation number 3 under research logistics. "The Secretary, in consultation with related agencies, should" -- and we should, again, harmonize how we say the same thing in three or four different ways and how we refer to the Secretary and his agencies -- "refine methods for collecting and analyzing environmental (physical, behavioral, and social)

factors influencing health and ensure that resources are devoted to developing new tools to validate existing methods and improve assessments of the environment."

Michael.

DR. AMOS: I was looking through the section before, and it talks about other government agencies. In this section here, it talks about related agencies, but it really doesn't spell out which other agencies should be considered. I think EPA would be critical, OSHA, USDA, even NIST from a standpoint of working on standards for data collection and things like that. It's just something to consider. I just think that's lacking in the document.

DR. WILLARD: So not necessarily in the recommendation itself, but in the text, you want us to be more explicit.

DR. AMOS: Well, perhaps even in the recommendation, but certainly in the text.

DR. WILLARD: I think we'd have to be careful that it not appear to be an all-inclusive list, lest we forget one particular group. That would be the danger I think. The question is whether the Secretary needs help in coming up with the list that you just came up with.

DR. AMOS: Probably not.

DR. WILLARD: Our intent was to be as open and expansive as possible, rather than restricting him to say, just do this with the NIH or just do this with one other group or two groups or something of that sort.

Other comments here? Emily?

DR. WINN-DEEN: Perhaps you just want to be clear that it's not limited to HHS, that he should consult with non-HHS agencies as well like EPA.

DR. WILLARD: Good point. We used that actual parenthetical in one of the other ones referring to both HHS and non-HHS. That's a good point.

Other comments on this?

(No response.)

DR. WILLARD: That was number 3.

Number 4, "The Secretary should encourage project leadership to consult with healthcare providers and organizations to develop uniform and secure approaches for collecting, storing, tracking, and centralizing clinical information to be gathered over the course of the project, including the use of electronic health records."

Reed?
DR. TUCKSON: Yes, I think this is a good one as well and well stated. I think that we may be able to, with a slight tweak, take better advantage of a discussion that happened yesterday, Hunt, where we spent a little bit of energy on the Secretary's initiatives regarding the interoperability and health information technology and the advances.

I do note with interest that the body of the report does speak to it, but one of the things it says is that -- I think the way that we described it was that anybody doing this work ought to connect to the initiative. I think one of the things that we might want to say to the Secretary is that the people designing the system ought to be thinking about uses such as this because, by the time we ever get to that point, so much of the HIT interoperability around collecting this data will have already been basically -- you know, the train would have already gone way down the track.

So just as a matter of subtly I'm sort of suggesting, not in the recommendation, but maybe in the body of the report, but somewhere we sort of urge the Secretary to have his people be thinking about these utilities as they design the health information interoperability.

DR. WILLARD: Other points from anyone else?

(No response.)

DR. WILLARD: That's research logistics.

The third policy area, regulatory and ethical considerations. We have four recommendations. The first, "The Secretary should convene a working group of representatives from the Office of Human Research Protections, the FDA, the Office of Civil Rights, and other relevant HHS agencies, to develop a set of recommended best practices and standard operating procedures, including for the institutional review board(s) that will oversee the study. Public input on the policies and procedures should be sought. This working group would be charged with ensuring that all research sites involved in the project are implementing the regulations established to protect research subjects, medical privacy, and patient safety."

Comments? Robinsue?

DR. FROHBOESE: I apologize for raising these eleventh-hour concerns, but I do have a number of suggested edits and issues that I'd like to raise about this recommendation.

DR. WILLARD: Okay.

DR. FROHBOESE: The first recommendation really does get at the issues raised within this section about ensuring the privacy and confidentiality of the information, as well as protection of individuals participating in the study. Clearly, we want to highlight this. But in looking at this recommendation now in context with the public comments as well, I have two major concerns and will suggest some edits.

One is that in terms of this working group to develop a set of recommended best practices and standard operating procedures, the groups that are identified for this working group already have very clear laws and regulations that the agencies have promulgated in their respective areas, and to ask them then to develop standard operating procedures and recommended best practices sort of puts them in this quasi-regulatory mode that could be complex in terms of, number one, authority to do this and, number two, crossing over a number of areas.

So what I'd like to suggest there is rather than having this work group of HHS agencies actually developing standard operating procedures, to characterize their role instead as to provide technical assistance on legal requirements regarding protection of research subjects -- I would substitute "health information" for medical privacy" -- and patient safety. So the role is really one

of technical assistance rather than actually promulgating a set of guidance or operating procedures that then could become binding and get us into a regulatory framework.

My second major comment is with this last sentence. "This working group would be charged with ensuring that all research sites involved in the project are implementing the regulations established to protect research subjects, medical privacy, and patient safety." I'd like to recommend a more generic statement that just acknowledges that individual HHS and other federal agencies would continue their enforcement and oversight responsibilities to ensure that all research sites involved in the project are implementing, and then the rest of the sentence.

Now, because I know that these are pretty detailed suggested edits, I don't know whether we're at a breaking point and it might be good for me to type these up and people can see them on the screen.

DR. WILLARD: Well, I'm less worried about the specific wordsmithing than the general comments, and I want to make sure the committee has a sense of what you're suggesting and whether there's general agreement.

Sherrie?

DR. HANS: I think actually the task force was very deliberate in suggesting that the Department of Health and Human Services and the appropriate offices that have the regulatory and oversight responsibility for these functions sit down and create policy in a very deliberate way.

The reason that the task force went in that direction is because many, many, many, many of the public comments were around a number of issues of privacy and confidentiality, of protection of human subjects, of ensuring that this data and information would not be made available to other third parties in government or outside of government. It was really in response to the concerns that until there was an assurance of protections and that that was well defined, it would be difficult to get broad public support for such a project.

So it really was deliberate, on the part of the task force, to ask HHS to establish a very deliberative policy to address some of those questions, interpreting existing regs.

DR. WILLARD: There are a couple of red lights down the line. Yes.

DR. CAROME: Just from the perspective of the Office of Human Research Protections, I do share some of the concerns that Robin raised. I agree that best practices, SOPs -- there might be different words for that like guidance and recommendations -- could be developed.

We would be particularly concerned about the last sentence. I don't think the last sentence, in terms of the charge of this work group, is feasible to implement this. The work group is going to be relatively small. It's going to have representatives from these regulatory offices. They're not going to be able to ensure that hundreds of institutions are complying with the various regulations that would apply.

Even more broadly, in the Office of Human Research Protections, we're not capable of ensuring that all the sites are going to comply with human subject protection regulations. We can facilitate it, we can advise, we can give guidance, but where assurance comes prospectively that people will comply and where it's ensured that that happens, that rests with the institutions, that rests

with the sponsors. It's not focused on a regulatory agency. We would have proposed significantly modifying or even removing that last sentence.

DR. WILLARD: That's very helpful. This is why we have a committee, to get this kind of input. I don't think it was the task force's intention to argue any differently than you just did, and so if it's inappropriate, as it sounds like it is, to say the word "ensure," then obviously we need to come up with a different word.

So maybe what I can suggest is that during the break -- and I don't think we're at the break yet -- Sherrie, Robinsue, and Michael get together and sort of craft better language that would meet the intent of the task force in considering the public comments, but then also be agreeable to your agencies and FDA as well if, Elizabeth, you want to listen in on that. That's a good point.

So let's have other comments, but then my intent would be to sort of table this recommendation and come back to it after it the break. So I see Martin down the line.

MR. DANNENFELSER: Just a point on that fourth line there. Do you need to limit this just to HHS, or should it just say "and other relevant agencies"? I think, for instance, perhaps you'd want the Census Bureau to be part of that kind of working group. There may be other agencies.

DR. WILLARD: I'm sure we don't intend to limit the Secretary. So we could use our same language of HHS and non-HHS.

MR. DANNENFELSER: Or even just take out HHS and say other relevant agencies. It doesn't limit it to HHS at least. So either way.

DR. WILLARD: Kevin?

DR. FITZGERALD: Just a quick question for Michael because I think you raised a very good point. So my question is normally the responsibility for something like this is with the sponsors. So who's the sponsor? Who would you see as the sponsor for this sort of large population study? And if it's the government, then -- this is a question. Who would you see then as the responsible group or a potential one?

DR. CAROME: Actually the primary responsibility lies with the institutions engaged in the research. So a secondary responsibility lies with the sponsor. So if it was an NIH institute that's funding some or all of the research, they would have responsibility for ensuring that IRB reviews are in place, certification of IRB reviews happen, that they have assurances. If it's other agencies involved, then they would also have some responsibility for ensuring that.

DR. WILLARD: Thank you for that, Michael.

Anything else on this one? We'll come back to it after the break once we have a few modifications to look at.

(No response.)

DR. WILLARD: Okay, the next recommendation is a new one based on the public comments, which is that "an independent ethics committee should be established to serve in an advisory capacity to the IRB and project management."

This probably does require some discussion and general consensus because it is brand new based on the public comments. Any comments?

DR. TUCKSON: So the question would be, independent of what?

DR. WILLARD: It's actually independent of project management, but advisory to project management. So it wouldn't be simply the project managers who would be doing this. It would have the air of independence as an ethics committee that would oversee.

DR. TUCKSON: So those of you who are familiar with NIH projects now, in terms of how you get ethics oversight -- I'm not sure I have enough detailed knowledge to know. Isn't there an independent ethics function that advises the conduct of these projects? Not at all? Are there any ethics folks who oversee?

DR. WILLARD: Individual institutes have councils but there's no sort of "uber ethics group."

DR. TUCKSON: And you guys, Alan, in terms of -- what's the ethics thing for genetics?

DR. GUTTMACHER: ELSI?

DR. TUCKSON: ELSI. It's like a cow's name.

(Laughter.)

DR. TUCKSON: Does ELSI do this?

DR. GUTTMACHER: There's a difference between what institutes have in place and what individual projects would have in place I think. So the institute has lots of different kinds of advisors, including advisors, different sets over the years in different ways, to our ELSI portfolio, but that's different from being advisors to a specific research endeavor.

DR. TUCKSON: So this is not calling for -- I guess what I was concerned about -- I should have said it -- in terms of my question was, is this calling for a redundant level of bureaucracy and is it a statement that says that existing ethics activity is not sufficiently independent so this becomes a slap in the face of existing infrastructure?

What I think I'm hearing here is that, no, such a thing does not necessarily exist for a particular project which has not yet been created. So when you create the project, you create an independent ethics activity for it, and that's the normal way you do this.

DR. WILLARD: The intent is also to be independent of the IRB. There is an IRB that's charged with making those kinds of decisions in terms of the actual substance of the project and how that's going to operate. But then this recommendation is that there's a group independent of that one which is looking down on top of the deliberations of the IRB and making recommendations.

DR. TUCKSON: So, again, I think all rational people would be in favor of having great ethical oversight. So the issue here is if you've got an overarching ethics committee looking down on the IRB in an advisory capacity, it sounds like it doesn't have juice because it's advisors. The real action is still in the IRB. So what would this group do other than to nod and look grim?

(Laughter.)

DR. HANS: Well, you might ask that of the ethics boards that sit in each hospital that help clinicians and management make decisions when values are in conflict about individual patient care. This board was really seen, once again, in response to public comments about concerns and particularly about the informed consent process and the ongoing informed consent process.

What I mean by that is there were many, many questions raised about how -- to sort of back and review informed consent. Informed consent is intended to be specific and to have knowledge about what it is you're consenting to, whether it's research or patient care.

However, we know that over time additional research questions may be raised which are very valid, exciting, and which the scientific community will want to pursue. One of the envisioned functions for this ethics board is to be able to, over time, assess those questions and determine whether the initial consent received remains valid for those future projects or whether a reconsent process may be required over time.

It's also envisioned that in the initial informed consent process, that they develop a statement that explains how that is to be handled so that the principle of transparency is embodied in the decisionmaking process for consent.

There were also a lot of other issues outside of informed consent that touch on some of the other issues, privacy and confidentiality, access to research data from non-researchers, how it will be used both internally within the Department and externally. So there were a number of issues in the design and ongoing oversight of the project. In response to public comments, it was felt that a very practically focused, problem-based ethics board should be in place to deal with those issues.

DR. TUCKSON: And, Sherrie, you obviously don't believe -- and I think from what you've just said, this would not weaken your normal function of the IRB. It doesn't create a competitor to the IRB. It doesn't create a parent of the IRB.

DR. HANS: No. In VHA, you know, we have ethics boards at each of our hospitals. We have IRBs at the majority of our hospitals as well. We also have other ethics functions. What we find is there is often a need, when the issues cannot be resolved within those parties or they feel like additional input needs to be brought to bear, that there needs to be a place for those questions to go. As a national office, we manage those sorts of questions. It's a similar idea.

There's nothing in here that says it has to meet whenever. It may be that such a board would be constructed and would meet very rarely and only be called in to deal with specific questions. It's not intended to be, as you say, an additional layer of bureaucracy. It's an opportunity for deliberative discussion of competing values and issues.

DR. TUCKSON: So, Sherrie, I like that then. So my concern is -- you got half of it which was a sense of not having a redundant layer of bureaucracy that just costs more money and just makes work and takes away resources from doing the science.

And secondly, my concern was that it not in fact or appearance weaken the legitimate, normal infrastructure of ethical scientific review called the IRB. You're saying that this would do neither and it would be in place and be there to serve if needed, and if it wasn't needed, you wouldn't have to -- at least you wouldn't have to create it de novo on the fly. And I think that makes sense.

DR. HANS: I think there were some initial design questions that this board would be helpful in informing the IRB initially and the governance body, but then its ongoing function would be, I think, more on of an on-call basis, as needed.

DR. WILLARD: This recommendation is remarkable for its brevity, but as I'm sure you'll recall when you read the full document, Reed, there's a long list of particular functions that this ethics committee would undertake, and I think they are different from what a standard IRB would do, even a specific IRB designed for this project.

Michael?

DR. AMOS: My question would be, is this scalable? I mean, if this is a 2 million- or 3 million-person study, there might be several IRBs that are involved. The way the project may be set up is that grants would be sent out to various sponsors, as Michael was talking about, to run certain aspects of the research. Each group would have its own IRB. Is this intended to be one ethics group that oversees all of those IRBs or --

DR. WILLARD: I mean, that's a level of detail that one can't address until one knows, A, is the project approved and, B, how is it set up. Some have argued for a central IRB. So regardless of how many millions, there would be a central IRB that would deal with it rather than dispersed IRBs. But we're not even prejudging that particular question.

DR. AMOS: I just want to make sure that it's something that's actually workable in case different scenarios occurred in the way the research is conducted.

DR. WILLARD: If the Secretary, in his wisdom, felt that we needed three independent ethics committees instead of one, that wouldn't be inconsistent with this recommendation, if it needed to be that because of scale or because of added complexities. At least for me, that wouldn't be an issue. That's a decision for him and project management to make.

Barbara?

DR. McGRATH: I'm sorry. Andrea was next.

DR. FERREIRA-GONZALEZ: With this recommendation and the previous recommendations, I have an issue with consistency. Here we talk about IRB without an S at the end, and in the previous one, we have an IRB with an S at the end. Here are we telling them they need to have only one IRB versus in the previous one where we have the S? It's just a multiplicity of IRBs. Just to be consistent throughout the document, where we have it open-ended, it might not be just a central IRB but something that they need to decide.

DR. WILLARD: That's useful. Thank you.

Barbara.

DR. McGRATH: Maybe the word "ethics committee" is a problem, though I don't have a better one in mind. But when I think of this committee, ethics ties into IRBs a lot, and I think the vision is that it's not just an IRB oversight committee, but it covers all of ELSI-kinds of issues. But I don't want to call it an ELSI committee either. That just sounds wrong. I think in the text it describes it more accurately.

One of the tasks that it does that is outside of that purview of IRBs is looking at issues like Dr. Mittman brought to our attention yesterday in her public commentary, sort of less policy type of issues but more social impact kinds of issues. I would see this committee as sort of looking at the big picture of what's happening with the results out of this study. Are recruitment strategies really capturing people? Not just following the IRB kind of requirements but the larger, broader, sort of global issues that the public commentary is sort of raising that this type of study is new issues versus just a large, regular genetic study.

DR. WILLARD: I think there's an opportunity for -- not that there's anything wrong with brevity, but I think probably this is too brief. It could read an independent ethics committee should be established to blah, blah, blah, and serve in an advisory. So actually give it's function in a brief phrase that would take the previous page where it's gone through in some detail and distill that down to a phrase that is meaningful in the context of a recommendation so that it doesn't just sit absent any clarity whatsoever.

Chira?

MS. CHIN: I work with a group that has several institutions that has their own IRB for one particular project, but they also have an overall, larger IRB to make sure everybody follows the same rules. Then from that point on, they have an ethics committee above that to kind of talk over. When we first drafted this, that's what I had envisioned this is what's going to go on because this is going to be a large project, many, many institutions. They will have their own IRBs. They have their own ethics boards, but overall, they need to come together with even ground somewhere so that they could kind of work together and share samples and stuff like that.

DR. WILLARD: Other points on this recommendation?

(No response.)

DR. WILLARD: So I'm hearing support for the general concept of this recommendation and perhaps some of the language can be improved and made consistent with the other recommendations. But I'm not hearing anyone argue against the need for such a committee. Okay.

Recommendation number 3 under regulatory and ethical considerations. "Project leadership should systematically and regularly seek the input of study subjects regarding their experiences, concerns, and recommendations for enhancing protections to ensure that the appropriate protections are in place and are being consistently implemented."

Comments? This is not a new one. This we've seen before in the previous draft.

(No response.)

DR. WILLARD: And the final recommendation under regulatory and ethical considerations. "Project leadership should develop guidance on the use of data and samples to promote the ethical use of clinical and epidemiological data and specimens. This guidance should be made available to subjects."
DR. FROHBOESE: One quick suggestion here, and that is rather than using the word "promote," use the word "ensure," given the critical aspect of ethical use, but also to insert "to ensure the legal and ethical use of clinical and epidemiological data and specimens."

DR. MANSFIELD: I would actually argue against using the word "guidance," which has another meaning in another world in that it's not binding.

DR. WILLARD: Do you have another substitute?

DR. MANSFIELD: Maybe something like rules. I don't know. Something that's a bit more binding. Guidance sounds like suggestions.

DR. FROHBOESE: One thing that we could do is just say, "Project leadership shall ensure the legal and ethical use of data and samples."

DR. WILLARD: Or is "policy" stronger than "guidance"? The home office can figure out a better word than "guidance," but that's a good point. Thank you.

Joseph?

DR. TELFAIR: Just that you may also want to consider "protocol" since that's a pretty straightforward word.

DR. WILLARD: Other points on this recommendation?

(No response.)

DR. WILLARD: Then public health, social, and economic implications. There are two recommendations here.

The first one, which is not brief apparently, "The Secretary and project leadership should systematically and regularly integrate project findings with other emerging data from other types of studies and regularly disseminate the accumulated knowledge base with clear descriptions of the possible clinical implications of the results and the limitations of the data, their generalizability, and their clinical and public health implications." Breath. "This information should be tailored to meet the information needs of the public, healthcare providers, and the public health community to use integrated information for the benefit of the population's health. Project resources should be sufficient for the integration, dissemination, and translation activities necessary to maximize the public health impact."

That is a large, sort of overreaching recommendation that covers a number of things, but it is mostly to make sure that information is disseminated and then used wisely in its broadest possible way for the good of the public. That's the short version of what's here.

Other comments? Jim?

DR. EVANS: Yes. The part about the possible clinical implications gives me some pause. They're going to be incredibly nascent. They're going to be incredibly contentious and conflicting. I have some concerns about kind of, in a way, requiring that aspect of it because of, by necessity, their preliminary nature as they're released on a regular basis. I just have some concerns about that.
DR. WILLARD: Do you have an alternative way of phrasing that?

DR. EVANS: Yes, leaving it out. Seriously. I think that dissemination and release of data is very important. I think that the clinical implications will be something that is picked apart

immediately by everyone who's receiving it. I'm just not sure how feasible it is to have that. I'm throwing that out there. I understand the concern and the desire to highlight the clinical implications, but man, they're going to be contentious. Look at how contentious every clinical implication that gets promulgated is.

DR. WILLARD: Emily?

DR. WINN-DEEN: So I just would urge you to think about it in the context of the Women's Health Study and the interim results, which were published and resulted in quite a substantial change in medical practice regarding hormone replacement therapy and prevention of heart disease. So I think there's an ethical obligation to publish interim results at the point where you have something to say, and I think your issue is do you publish interim results before you really have something to say.

DR. EVANS: Right, and I think you bring up a very important point. I think that that particular example illustrates one end of the spectrum. When results are so clinically compelling, then they need to be highlighted. So maybe saying something like descriptions of the clinical implications when they have reached a level that contributes to our clinical knowledge.

In other words, look at the Human Genome Project. You got a lot of release of a lot of data, and that's a really good thing. That's going to go on, and then every once in a while, there will be things with clinical implications that should be highlighted. So maybe some modifier there that -- clinical implications when the data specifically address such issues, or something like that.

DR. WILLARD: First Linda, and then Kevin.

DR. BRADLEY: Yes. I think that if you read further into the sentence, you get to the point that the clinical implications are going to be discussed. We know they are with everything that's found. The point of this is to look at the limitations of the data, their generalizability, and their clinical and public health implications. So I think the point is exactly that, to be sure and look at the clinical implications in the context of what the data actually can show.

DR. WILLARD: Maybe the word "balanced" can be in there.

Kevin?

DR. FITZGERALD: I just realized this now. We have clinical implications twice there. We have the possible clinical implications of the results -- and I'm presuming -- and the limitations of the data. So maybe we could say instead something about pertinent or relevant clinical public health implications to try to avoid what Jim is raising of the possibility of just dumping something out there which, of course, is just going to add fuel to fire and not necessarily enlighten anyone, but try and throw in some kind of phrase that says pertinent or relevant or something like that. Balanced could be it too.

DR. WILLARD: We'll come back to you, Jim.

Scott, did I see your hand up?

DR. McLEAN: No. I was just going to reiterate that I think the language is in there, the implications of clinical findings. You could simply leave out the second "clinical" and I think have simply the "public health implications," and that would be fine.

DR. WILLARD: Chira?

MS. CHIN: That's what it was initially intended to do, to make sure the clinical implication is strong, so that the report will be given out. One of the reasons why we have that in the document is one of the public commenters addressed that they wanted to have it to disseminate it out to the public when good data is being released and the patient wants to know what's going on.

DR. WILLARD: Elizabeth?

DR. MANSFIELD: Maybe I'm a minimalist, but I don't think we need to tell the Secretary exactly how he needs to release the information. I think you could just go "disseminate the accumulated knowledge base in a manner to benefit the population's health" and leave the rest of it to be decided.

DR. WILLARD: Michael?

DR. AMOS: Yes, I actually agree with that. That's a great way to put it because who's to say who's to make the call that the data is good or not. Without getting into more detail of whether it needs to be peer-reviewed published and reviewed and then repeated 10 times by independent investigators, or at least analyzed on several different fronts, just to keep a general statement like that is much better.

DR. WILLARD: Gurvaneet?

DR. RANDHAWA: Yes. I just want to support what Elizabeth said because I think some of the debate that we're having here will not be resolved by this study. The study will be an observational study. Most of the findings are going to be hypothesis-generating, not hypothesis-testing, unlike the Women's Health Initiative, which is a randomized controlled trial, specially designed to test whether the hypothesis was true or not. So people will always understand the caveats of an observational study and the implications. So instead of being too directive, the minimalist approach is better. I recommend that too.

DR. WILLARD: I'm sensing some of that.

Jim, we're back to you.

DR. TELFAIR: Yes. Gurvaneet makes a great point. I think that we want to avoid the inherent misleading that can result from observational studies. I like the minimalist approach.

DR. WILLARD: That's called consensus-building. Thank you, everyone, on that. That's a good one.

The next recommendation under public health, social, and economic is a new one. "The Secretary, in consultation with project leadership, should establish an independent standing committee for the duration of the project to periodically assess persistent and emerging social and economic implications of this initiative with special attention to health disparities. The committee should consist of individuals with expertise in the relevant sciences, medicine, law,

ethics, and patient and community advocacy. The committee would routine seek public input on the implications of the project results and report its findings."

A previous version of this was in the draft report. It's the addition of economic, which is what's really new here, and that's why that's highlighted on the screen.

Comments on this one?

(No response.)

DR. WILLARD: We used it all up on the previous one.

We've got two more to go. So my intent, with your forbearance for being a couple minutes over the allotted break time, is we'll do the last two recommendations under public engagement. That's then a good time for a break. We'll come back from the break, revisit the one recommendation that we said we would revisit, and then move on with further discussion from there.

So under public engagement, there are two recommendations. The first one is this. "The public's willingness to participate in a large population" study "should be assessed before embarking on such an extensive endeavor. Willingness could be assessed through opinion polls, requests for comments posted on agency websites, and other proven methods. Such an assessment should be made in advance of a funding decision."

Comments? Elizabeth?

DR. MANSFIELD: Are the first and last sentences perhaps a bit redundant?

DR. WILLARD: As I was reading it, that did occur to me.

DR. MANSFIELD: Just in the interest of brevity.

DR. WILLARD: So combine those two. I think the sense of the task force was in advance of funding and in advance of starting are perhaps two separable events, but nonetheless, they could be merged into the same sentence to make it read better.

Other comments on this?

(No response.)

DR. WILLARD: And the second recommendation under public engagement. "If a decision is made to proceed with the project, it will be important to ensure that public engagement occurs throughout all aspects and stages of the research process, from conceptualization through design, planning, implementation, conduct, and data analysis and reporting. Public engagement also will be important in applying the knowledge gained by the research and in addressing its implications. The Secretary should ensure that sufficient project resources are dedicated to public consultation activities before and throughout the duration of the project."

Michael?
DR. AMOS: What about following up after the project is over as far as how the recommendations or the data is actually affecting public health on an ongoing basis afterwards?

DR. WILLARD: As part of public engagement or as sort of a separate question?

DR. WILLARD: No. I mean as part of public engagement from the standpoint of after the study is over and the reports are out and people are starting to follow the recommendations, over the years it's going to be important to find out the actual metrics with some metrics of how -- if this is really having an effect on people's lives, if they were actually using and paying attention to this.

DR. WILLARD: So I'm seeing that as assessment of the value of the project, but I'm less seeing that as part of public engagement. That's actually an assessment on whether the incidence of diabetes has actually decreased somehow or we have better management of diabetes because we've done this project. Unless I'm missing your specific point.

Yes, Joseph?

DR. TELFAIR: I think I have a sense of what's being asked. I'm just not sure whether or not this is sort of in our purview at this point. I think it's the whole idea of when you do collaborative work and the actual engagement of that, that at every stage of collaboration from the actual implementation to the follow-up, which is what's being discussed, you maintain that level of engagement. So everything involved in assessing things like efficacy and outcomes and that sort of thing is there, but also now you're adding the element of those that are involved -- basically the whole principle is those you're experimenting with are also involved in the decisionmaking process. So even in the follow-up, the assessment process, that sort of thing, you also engage them as well. I think that's kind of what -- is that in the ball park of what you're asking?

DR. AMOS: Yes, and also the people in the study. It would be important to find out what impacts it had on their lives moving forward after the study is over. We heard the lady talk about the issues of the Ashkenazi Jewish population yesterday, and it would be important to assess if this had any sort of negative or positive effect on the study participants.

DR. WILLARD: I see the point.

Joseph?

DR. TELFAIR: I understand that, and so I guess my point is that I think we are sort of engaged to the point of where, if this is done, that's where we are. But in terms of the other, as you said, second part, part two, or second phase thing, that's kind of what this falls into, the way I see it. We're at our point in saying that we should have participation, full engagement up to that point, but if the decision is made to move forward with it, then that's another phase. That's another level of consideration about this engagement. That's what I would recommend we consider.

DR. WILLARD: So we just need language that expresses what we mean by follow-up for the two parts of this, which should be easy enough for the home office to add.

Elizabeth?

DR. WILLARD: We're going to have a minimalist alternative from Elizabeth.
DR. MANSFIELD: Yes, I think you just need to make a recommendation, like you have in other ones, and you could probably do that with a little restructuring of the last sentence. I don't think we need a thesis, but a recommendation.

DR. WILLARD: And you will help us with that.

DR. MANSFIELD: Of course.

DR. WILLARD: Thank you. We pay by the word.

Any other comments on this recommendation?

(No response.)

DR. WILLARD: Okay, terrific. So we have consensus on 17, with some suggestions for changing of language, and we have one that we can consider after the break. Mr. Chairman, back to you.

DR. TUCKSON: Well, let's see now. How long a break do you want? Do you want 10 minutes, 15 minutes? 15? All right. So we'll see you at 20 after.

(Recess.)

DR. TUCKSON: I forgot to bring something to your attention. It's the greatest thing since sliced bread. So here's the deal. You may have taken it for granted it was so good, but if you notice in the report, each one of them has something called Tabstract. Did you notice? And if you didn't, you should have noticed them. I was supposed to have told you this from the beginning. You like that? This is like copyright-level stuff. Who came up with this?

(Applause.)

MS. CARR: Let me clarify that. This was in response to a specific request from Jim Evans.

DR. EVANS: But I didn't call them Tabstracts.

MS. CARR: No, you didn't.

DR. EVANS: That was the genius.

MS. CARR: That goes to Yvette.

DR. TUCKSON: So anyway, we're going to keep this format, by the way, because I think it's really terrific. It gives you the key questions to consider. So Yvette did a good job on that. So we want to thank you.

DR. SEGER: And the rest of the staff too.

DR. TUCKSON: And the rest of the staff too, and she's giving out credit to everybody.

Take it away, sir.

DR. WILLARD: Okay, thank you.

So we have two things to deal with quickly. The first of these is our revised recommendation number 1 by this cracker jack legal team of Robinsue, Sherrie, and Michael. So this recommendation now reads: "The Secretary should convene a working group of representatives

from the Office of Human Research Protections, Food and Drug Administration, the Office for Civil Rights, and other relevant agencies to address issues and questions raised by the public and to provide technical assistance and guidance to research sites on legal requirements regarding protection of research subjects, health information, privacy, and patient safety."

Comments? So it's the best of both worlds. It creates the working group, allows them to provide input and guidance, but without stepping on the legal issues that were misstated last time. Go ahead, Sarah.

MS. CARR: I was just wondering about whether in the phrase "to address issues and questions raised by the public," you might want to describe the nature of the issues and questions that this group would address versus any other. I don't expect that they would address questions about design of the study or the scientific goals and so forth. The questions that would be put to this working group from the public would be those pertaining to ethics?

DR. WILLARD: With all due respect, these were three lawyers who wrote this. The phrase at the end regarding protection of research subjects, health information, privacy, and patient safety," I read as modifying everything that appeared above, which includes issues and questions. Is that correct?

DR. FROHBOESE: That was certainly the intent, but we'll defer to the wordsmithers to make that clearer, if need be.

DR. WILLARD: Other comments? Kevin?

DR. FITZGERALD: Just a clarification. So here, the focus seems to be at the end there on legal requirements regarding protection of research subjects. So I presume that's intentional, and we don't want to add ethical and legal requirements because that would be outside the purview of this group?

DR. WILLARD: That's a different group.

DR. FITZGERALD: Okay.

DR. RANDHAWA: Just for clarification, how does the committee envision the mechanism of public input for this working group?

DR. HANS: The initial public input really was this public comment period. A lot of the issues and questions that need to be addressed were raised during the public comment period. So the first task would be to sort through those public comments and determine which of those are legal questions that need to be answered, and then after that, there are a variety of public engagement mechanisms that, if established, could be drawn on to provide additional feedback and input.

I suspect that throughout the process of public engagement, issues will continue to be raised that need to go somewhere for this kind of assessment.
DR. WILLARD: Although you could imagine that the issues and questions could be raised by anyone, not just the public. They could be raised by project management. They could be raised by project participants, as well as the subjects themselves.

Other comments?

(No response.)

DR. WILLARD: Thank you very much to the team of three there. That was terrific.

Another suggestion came up during the break from Scott McLean, and I'll ask you, Scott, to explain it better than I ever could.

DR. McLEAN: Well, I was struck, in reading the public comments and getting the tenor, that there was a lot of concern on the public's behalf of ethical oversight, protection. One of the things that I'm familiar with in some of the military research that we do on protected and vulnerable populations is appointing an ombudsman to speak for that group who may not be able to articulate their concerns or their position adequately. There might be a role for that on some overarching level, dealing with particular vulnerable populations that this study will address.

I just thought that that might be -- I wasn't sure how that would fit into what we've discussed so far. We have an overarching ethics committee that might be independent, and I'm just wondering what the thoughts were on sort of the ombudsman type of element to this.

DR. WILLARD: Comments or reactions? Sherrie?

DR. HANS: It's an interesting question whether an individual needs to be appointed per se or whether one of the two committees that have now been recommended be explicitly given that role because there's the ethics committee and then there's the committee that's been recommended for the social and economic issues, whether in the consideration of the formation of either of those two, to ensure that the functionality of an ombudsperson is explicitly described in there.

DR. McLEAN: I think the ethics committee would have its primary allegiance to the ethics, and an ombudsman would have their primary allegiance -- and it may not be an individual. It may be a group -- to be a spokesperson for those research subjects. I don't think it's a subtle difference. I think it's a real primary differentiation.

DR. WILLARD: Other comments or reaction? Barbara?

DR. McGRATH: I think it's a great idea. But it's not an absolute certainty that it would be a useful role. But maybe one place to put it in, just to plant the seed, would be in the description, the text of that social, legal, and economic policy advisory group, such as the appointment of an ombudsperson for issues or something like that. Put it as an example of one of the functions of that second group.

DR. WILLARD: Within the text.

DR. McGRATH: In the text.

DR. WILLARD: Is anyone opposed to the inclusion of that as one of the possible roles this committee could play? All we're doing is providing examples of the kinds of functions. We're not trying to prescribe, not that we could anyway, the action the Secretary might take.

(No response.)

DR. WILLARD: Scott, thank you for raising that.

So here endeth the recommendations. At this point, there are a number of questions which are on the slide. I think we have touched on most of these as we've gone through. I think it's really the bottom two bullets on this. Are there additional areas that need to be addressed that somehow we've missed? Now that we've just run the gamut of everything in the report, have we missed something? And then if yes, let's address that now. If no, then we can move on and spend the time about what actually our conclusion is, given all of this, because that is a section of the report that will, I'm sure, receive more attention word for word than many of the other areas of the report.

So, first, are there areas that we have missed either from what people have read about the public comments or just in thinking this through?

(No response.)

DR. WILLARD: I think that is a reflection of the fact that we've been mulling this over for the better part of a couple years now.

So then the question comes to the conclusion. The one issue I think, to come back to the discussion we had at the beginning this morning, speaks to the tone of the report. So I think, as we discussed previously, we do want to appear neutral. We want to actually be neutral and have the tone and the language sound that way.

On the other hand, as Alan articulated, there certainly is an opportunity to phrase that in such a way that says explicitly that we acknowledge that there is a substantial potential benefit from such a study for the improvement of health of the American public and that, therefore, the following issues need to be addressed and tackled prior to deciding whether, in fact, such a project should be undertaken and in what way.

The alternative is to be completely neutral, even in the conclusion, and simply to put our hands up and say we were told to suggest some issues. Here are the issues. Here are some potential mechanisms, and best of luck to you, Mr. Secretary.

So I'm going to open that wide open to the committee. I think this remains the one issue that we have to settle as a committee in order to come to a consensus on what the tone of the conclusions should be so we can be of greatest help to the Secretary and yet also reflect what we've been doing for the better part of two years.

Comments? Joseph.

DR. TELFAIR: I guess I would just comment that I think it's important that the tone itself be consistent with, first, the overarching recommendation that we made which, to me, does set the tone for the rest of the report, and secondly, that it be very succinct.
Well, let me just back up. What I mean by succinct is that the concluding remarks themselves do not have to be extensive. They just should reflect or even summarize briefly what we have there. But I do think importantly the tone should be consistent with the overarching recommendation because that was done after review of everything else. I do not think it's inconsistent with what we've discussed or has come up so far. Just a comment.

DR. WILLARD: Other comments? Kevin?

DR. FITZGERALD: Just to try to climb up on the bridge that Reed pushed me off --

(Laughter.)

DR. FITZGERALD: -- and then said I jumped --

(Laughter.)

DR. FITZGERALD: I think getting back to what we were asked to do and the three things that we identified was identify the issues, outline approaches that could be used, and then recommend mechanisms, I don't think it's inappropriate to say that we see this process in and of itself as being of great benefit, not trying to in any way, shape, or form say how the process will eventually work out, but that the process in and of itself is something, the process of doing, A, what we did, and then the Secretary going forward and doing a rigorous evaluation of these issues that were raised.

So, in other words, if there's a positive to really be emphasized here, it's to say what we're doing is a good thing and what we ask the Secretary to do we think is, obviously, a good thing in and of itself, without conditioning that on any particular conclusion being reached.

Is that better? Can I stay on the bridge now?

DR. WILLARD: Other comments? Sylvia?

MS. AU: I just want to make sure the conclusion shows that we are really supportive of a careful public consideration of the participation and costs of this project in the overall scope of our current healthcare system and maybe failing healthcare system so that it's very supportive of the Secretary needing to do a lot more consultation with the public, economists, health insurers, policy makers, so that it's not a for or against the project. It's for consultation for sure.

DR. WILLARD: Other comments? Alan, do you have a reaction that you wish to share with us?

DR. GUTTMACHER: I don't want to take up the committee's time by saying the same thing I said before, but I would say the same thing I said before.

(Laughter.)

DR. GUTTMACHER: So I do think that we ought to come to some kind of -- I agree with what other people are saying. I absolutely agree, for instance, with Kevin's point that even if there was a decision eventually not to go forward with this process, that the process of looking into that in and of itself is worthwhile. This will say things that would be pertinent not just to a large population base. It will say stuff that's pertinent to a lot of health research, et cetera. It's worthwhile for the Department at the highest levels to be thinking about, et cetera. So I absolutely agree with that.

At the same time, I do think that we should, in the conclusion, have a brief statement that the potential benefits of this to the health of the American people are significant and unique, in fact, I would argue, whether we want to use the word "unique" or not, and that's what makes it worth spending the amount of time and money that it would cost to do this kind of further thought.

So I'm not sure it's up to me as advisor to the committee, but the committee might want to decide up or down whether it wants to have that in there I guess.

DR. WILLARD: Yes, because you're not saying that we are supporting the concept of a large population study. It is simply that we're supporting an extensive and comprehensive analysis of the issues.

DR. GUTTMACHER: And the reason why we do that is because we think that it has potential. I would include the word "potential" in there. You know, there are such potential significant benefits.

DR. WILLARD: Barbara?

DR. McGRATH: I don't disagree with that, but if I were to include that cause, then I would have to attend to the other side of me that's feeling -- a big subtext with this is the lessons we have learned from the Human Genome Diversity Project and the history of other large databases internationally that have had issues of confidentiality and privacy concerns really rise to the top and put a reason for slowing down and being very, very careful about this.

But then we get into those phrases of there are benefits, but there are risks. So that's why I keep coming down to the idea of neutral because I keep seeing them pretty equal. I don't personally feel that the uniqueness of this is so much bigger than the potential challenges of it. But, luckily, I'm not the Secretary and I don't have to make that decision, but just sitting from where I am --

DR. GUTTMACHER: I guess I would say that I see this as distinctly different from the Human Diversity Project. Some of the issues may be the same, but this whole process that the report is suggesting is that this process in many other countries, for instance, when they have considered this, have lacked and is exactly the reason why they've gotten to some of the, I was going to say, ethical, but let's just say quagmire that they have gotten into. So I think we are being evenhanded by including all of the rest of the report.

DR. WILLARD: Jim?

DR. EVANS: I tend to agree with what Barbara said in the sense that I'm agnostic about whether the benefits will outweigh the risks.

DR. WILLARD: Kevin can help you with that.

(Laughter.)

DR. FITZGERALD: But it will cost you.

(Laughter.)
DR. FITZGERALD: Eternally.

DR. EVANS: I think that, given our charge, maintaining neutrality is highly appropriate. I don't think that prohibits us from saying that it is possible this will reap great benefits, but I think if we say that, we necessarily have to say, on the other hand, it could be a waste of a lot of money. So my tendency then is to avoid those "if on one hand, then the other" things by maintaining the neutrality that I think was very nicely summarized in the overarching statement.

DR. WILLARD: Just to give an alternative view to that, however, if we don't write the sentence that says it has great potential but it also raises a number of issues that require exploration and

therefore, someone else is going to write that phrase. Therefore, isn't it in our best interest to write what we really mean? And if what we really mean, in terms of consensus from the committee, is there are both significant, potential benefits and a number of troubling issues that require in-depth analysis, then that's what we believe. It can be written in a way that is "balanced," but if we don't write that, my concern is a whole bunch of other people will be writing that, and you have no idea how that's going to come out. The difficulty with appearing neutral, trying to be completely neutral is that others will then decide how they want to describe what you are being.

I think it can still be written in as balanced a way as possible because I do think there are nuances here, and depending on how analysis of the issues comes out, any one of us might then say, great, fantastic project, let's go do it or say, no way. Notwithstanding the great potential, it's just not worth these other issues. But that's going to take a full in-depth analysis that we hope the Secretary would support. So that's just a different point of view from the --

DR. EVANS: I completely support that. Again, I think Barbara summed it up, like you did, that if we avoid that flat, neutral language, then we have to put in pluses and minuses, and I think that is certainly doable.

DR. WILLARD: Other comments?

(No response.)

DR. WILLARD: I find it remarkable that there are no other comments.

Mr. Chairman, what kind of a conclusion would you like us to articulate? This is a report of the committee. It is a report of the committee after two years of intensive work. Are you wishing a sort of the committee reached five conclusions, here they are, or are you looking for a general statement of the conclusion pointing to the 18 recommendations?

DR. TUCKSON: No. At this point it is whether or not we are prepared for this to go out to the Secretary. So I think the issue is, is the committee satisfied that you have reviewed these issues enough that you understand the consensus in terms of any modifications that we've made, and basically it is now time to put a bow on this and send this to the Secretary?

I would urge you, unless you have any particular major unreadiness, which did not come out at the end of reviewing these, to authorize your subcommittee to present this in final, typed, nice form and it goes out to the Secretary for his review. If you have any unreadiness that you want to be concerned about that causes you not to be able to have that report go to the Secretary, then you need to speak up as to why that is.
DR. WILLARD: Is there anyone who feels they are not ready to essentially vote on approval or non-approval of the final report? If so, why? Joseph.

DR. TELFAIR: I'm sorry. I apologize. This is going to be a little bit out of order. But my question is about the conclusion. Are you envisioning that the conclusion will be written sort of after this particular vote you're asking? Do we need to see that conclusion?

DR. WILLARD: Yes. The conclusion would come to the full committee.

DR. TELFAIR: It's a process question.

DR. WILLARD: Yes. In fact, the whole final report will be, but you're not expecting to see any surprises in the first 60 pages, but the conclusion page or two or half a page, or whatever it turns out to be, will be de novo in that you'll see it for the first time. We'll have to do that as an iterative process of refinement and ultimate approval essentially by email.

DR. TELFAIR: Okay, thank you.

DR. WILLARD: But I think what Reed is calling for or will soon call for is a statement that says, subject to that, we're ready to say this report is done essentially with a few minor tweaks that the task force and the home office will take care of, and then you're prepared to see it as the final report.

DR. TUCKSON: So let's just make sure we're absolutely clear here because Joe is right on the money in terms of this. As far as we are, I think, concerned, you have approved a report that's going to the Secretary. The thing you have not seen is this last little bit of conclusion language which staff is prepared -- "home office" now forever known -- to turn around in the next couple of weeks.

Sarah, I need to be real clear in terms of how you view this. Once that conclusion is done, everybody gets a copy of this. It is not for revote, re-anything. It's to look at it. I assume if somebody sees something overwhelmingly noxious, that's completely different from your understanding of what we agreed to in that conclusion sentence, you have the opportunity to call me or Hunt, and we will jump and get involved. But as far as we're concerned, you're getting the courtesy of taking a look at the final, but you've already approved it at this meeting, if you in fact so do in the next minute, and it goes out the door, so that the Secretary would get this report on or about Christmas. Before. January.

(Laughter.)

DR. TUCKSON: They just told me it turns around in two weeks.

You know, you've got to make sure it's pretty and polished and looks nice and there are no typos and so forth. So the Secretary gets the report on or about January 1, which means you don't get to have another meeting about this, not another giant conference call, not another yamma, yamma, yamma about nothing. So that's where we are on this thing.

So I will turn it back to you, Hunt, to bring this vote to a closure. In fact, I guess I have to do that.

DR. WILLARD: Yes. That's your job, man.
DR. TUCKSON: Darned, man. You did such a good job.

So let me put a motion on the table for you. The motion for you to vote on -- who gets to vote on this?

MS. CARR: Members.

DR. TUCKSON: Members. We love you, ex officios, but you don't get this one. But you voted a lot yesterday, so you should be in good shape.

(Laughter.)

DR. TUCKSON: The members vote to accept the report and recommendations as described and discussed at this meeting. Let's stop there. I will get to plan 2 in a minute. So you are voting now to accept the report as discussed and revised and consensus reached on each point at this meeting.

All those in favor of that, accepting the report and the recommendations --

DR. WILLARD: And the recommendations.

DR. TUCKSON: And the recommendations. All those say aye.

(Chorus of ayes.)

DR. TUCKSON: Anybody opposed?

(No response.)

DR. TUCKSON: Good. All right.

Second is that we will forward this report to the Secretary to include a conclusion that will be shown to you in the next two weeks, and if there is any major upsetness about something in that conclusion, you will notify Hunt Willard or Reed Tuckson immediately. Otherwise, the vote is that this a concluded report that is being transmitted to the Secretary on or about January 1.

All in favor?

(Show of hands.)

DR. TUCKSON: Anybody against?

(No response.)

DR. TUCKSON: You are terrific.

Hunt Willard, you did a fantabulous job. The committee did a fantabulous job.

(Applause.)

DR. TUCKSON: And the Tabstract is a fabulous job.
DR. FITZGERALD: Just a clarification. So if that were to occur that somebody were to get a hold of you and Hunt, what's the process then at that point?

DR. TUCKSON: We will, first of all, look at it, agonize over it, and decide whether or not it's deserving to go back and let people take a look at it and weigh it, always believing in the respect for the consensus process.

Okay. We are now at the next stage where -- by the way, I'm supposed to remind you all about lunch, wherever it is. We're going to keep working for a minute. What time is it now? It's 12:00 now. Lunch was at 12:30.