

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

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FOOD AND DRUG ADMINISTRATION

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RISK COMMUNICATION ADVISORY COMMITTEE

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FRIDAY,
FEBRUARY 27, 2009

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The meeting convened at 8:00 a.m. in the NTSB Conference Center, 429 L'Enfant Plaza, S.W., Washington, DC, Baruch Fischhoff, Ph.D., Chair, presiding.

COMMITTEE MEMBERS:

- BARUCH FISCHHOFF, Ph.D., Chair
- CRAIG ANDREWS, Ph.D., Member
- CHRISTINE M. BRUHN, Ph.D., Member
- ANNAMARIA DeSALVA, Member
- SOKOYA FINCH, M.A., Member
- MICHAEL GOLDSTEIN, M.D., Member
- PRERNA MONA KHANNA, M.D., M.P.H., Member
- MADELINE Y. LAWSON, M.S., Member
- MUSA MAYER, M.S., M.F.A., Member
- JOHN E. PALING, Ph.D., Member
- ELLEN M. PETERS, Ph.D., Member
- BETSY LYNN SLEATH, Ph.D., Member

DRUG SAFETY AND RISK MANAGEMENT ADVISORY COMMITTEE MEMBERS:

- D. BRUCE BURLINGTON, M.D., Industry Representative
- TERRY C. DAVIS, Ph.D.
- TIMOTHY S. LESAR, Pharm.D.
- SIDNEY M. WOLFE, M.D., Consumer Representative

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FDA PARTICIPANTS:

LEE L. ZWANZIGER, Ph.D., Designated Federal
Officer/Executive Secretary

DEBORAH HENDERSON, Director, Office of
Executive Programs, CDER

NANCY M. OSTROVE, Ph.D., Director for
Risk Communication, Office of the
Commissioner

JEFFREY SHUREN, M.D., J.D., Associate
Commissioner for Policy and Planning

GUEST SPEAKERS:

DAVID P. MOXLEY, M.S.W., Ph.D., D.P.A.,
Oklahoma Healthcare Authority Medicaid
Endowed Professor of Health and Public
Health, and Professor of Social Work,
University of Oklahoma

D.K. THEO RAYNOR, Ph.D., Professor of Pharmacy
Practice, University of Leeds, U.K., and
LUTO Research, Ltd. (Via video
teleconference)

LISA SCHWARTZ, M.D., M.S., Outcomes Group, VA
Medical Center, White River Junction,
Vermont

STEVE WOLOSHIN, M.D., M.S., Outcomes Group, VA
Medical Center, White River Junction,
Vermont

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P R O C E E D I N G S

8:09 A.M.

1
2
3 DR. FISCHHOFF: Let me welcome you
4 all here and welcome the members of the panel
5 back to the second day of our meeting. And
6 let me immediately turn it over to Dr.
7 Zwanziger for the conflict of interest
8 statement.

9 DR. ZWANZIGER: Thank you, Dr.
10 Fischhoff.

11 Good morning, members and
12 consultants of the Risk Communication Advisory
13 Committee and the Drug Safety and Risk
14 Management Advisory Committee. Members of the
15 public, press, and the FDA staff, welcome to
16 this meeting. This is an announcement for
17 those who were not here yesterday. Sorry to
18 the rest of you.

19 The following announcement
20 addresses the issue of conflict of interest
21 with respect to this meeting and is made part
22 of the public record to preclude even the

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1 appearance of such at the meeting. Today, the
2 Risk Communication Advisory Committee and
3 members of the Drug Safety and Risk Management
4 Advisory Committee will discuss points the FDA
5 should consider regarding the appropriate next
6 steps to improve the communication of
7 information about prescription drugs to
8 patients, including different types of
9 prescription drug information currently
10 available to patients in the form of
11 medication guides, patient package inserts,
12 and consumer medication information.

13 Based on the submitted agenda for
14 the meeting and all financial interests
15 reported by the Committee participants, it has
16 been determined that no financial interest in
17 firms regulated by the Food and Drug
18 Administration present potential for conflict
19 of interest or the appearance of a conflict of
20 interest at this meeting.

21 We'd like to note for the record
22 that Dr. Bruce Burlington, industry

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1 representative on the Drug Safety and Risk
2 Management Advisory Committee, will be
3 participating as industry representative in
4 accord with the charter of the Risk
5 Communication Advisory Committee. The Risk
6 Communication Advisory Committee members Jacob
7 DeLaRose, Sally Greenberg, and Michael Wolf,
8 have been unable to attend the meeting due to
9 urgent scheduling of patient and family
10 matters.

11 We also note an item that doesn't
12 present a financial conflict of interest, but
13 that we believe should be disclosed. Dr.
14 Betsy Sleath was involved in data collection
15 in one part of the material in the report that
16 was presented yesterday and may come up today.

17 And one part of the reported study included
18 asking experts to review samples of consumer
19 medication information and score them on the
20 basis of the criteria developed by a different
21 set of experts, but including attention to the
22 standards set forth in the Agency's guidance.

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1 Dr. Sleath is one of these experts. She was
2 not a designer of the study, nor the
3 evaluation criteria, nor is she an author of
4 the report.

5 The design and execution of the
6 study itself is not a question before the
7 Committee at this meeting, but it is possible
8 that it might be mentioned throughout the
9 discussion. She received a small honorarium,
10 but as there is no on-going and indeed, there
11 is no possibility of an on-going or future
12 arrangements to influence her. We are
13 disclosing this connection so that any
14 comments she makes can be interpreted in
15 context.

16 In general, the Committee
17 participants are aware of the need to exclude
18 themselves from involvement in discussions of
19 topics if their interest would be effected and
20 their exclusion would be noted for the record.

21 With respect to all other
22 participants, we ask in the interest of

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1 fairness that they address any current or
2 previous financial involvement with any firm
3 whose product they may wish to comment upon.

4 We have a period of open public
5 hearing later this morning listed in the
6 agenda. It's fairly fully subscribed, but if
7 anybody would like to speak and has not
8 already signed up, please see one of my
9 colleagues at the table outside.

10 The entire meeting is being
11 transcribed. The transcript is posted on the
12 FDA website. It can only contain what the
13 transcriber can hear, so please turn on and
14 speak into your microphones when you are
15 recognized to speak and turn them off when you
16 are done.

17 Also, if you have any buzz
18 possibility devices that might go off, please
19 turn them to the silent mode. Thank you.

20 DR. FISCHHOFF: Thank you very
21 much. So we're here today to discuss how we
22 can help FDA to fulfill its mission to provide

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1 useful consumer medical information to all
2 Americans. And we will pick up the discussion
3 that we had yesterday.

4 Let me just ask each of the members
5 of the Committee to identify themselves
6 briefly and then we'll go into -- we have
7 excellent speakers today. We'll go into that
8 as quickly as possible. So I'm Baruch
9 Fischhoff from Carnegie Mellon University.
10 And we'll start at that end this time.

11 DR. OSTROVE: I'm Nancy Ostrove
12 with the Office of Planning in the FDA
13 Commissioner's Office.

14 MS. HENDERSON: I'm Debbie
15 Henderson, the Director of the Office of
16 Executive Programs and the Center for Drugs at
17 FDA.

18 DR. GOLDSTEIN: I'm Michael
19 Goldstein, I'm a Committee Member and a
20 Professor of psychiatry and human behavior at
21 Brown University and I'm also at the
22 Providence VA Medical Center.

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1 MS. MAYER: I'm Musa Mayer. I'm a
2 Committee Member and author and breast cancer
3 advocate.

4 DR. PALING: I'm John Paling. Good
5 morning to you all. I represent the Risk
6 Communication Institute. I consult with
7 doctors and hospitals about how to better
8 communicate risks with patients. And I'm
9 married.

10 MS. LAWSON: Good morning. I'm
11 Madeline Lawson. I'm a Member of the
12 Committee and I'm the President and CEO of the
13 Institute for Multi-Culture and Minority
14 Medicine based in Washington, D.C.

15 DR. DAVIS: I'm Terry Davis. I'm a
16 Professor of Medicine and Pediatrics at
17 Louisiana State University Health Sciences
18 Center in Shreveport.

19 DR. ANDREWS: I'm Craig Andrews.
20 I'm a new Committee Member. I'm a Professor
21 and Charles Kellstadt Chair in Marketing at
22 Marquette University in Milwaukee, Wisconsin.

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1 DR. PETERS: I'm Ellen Peters. I'm
2 a Decision Psychologist. I study how people
3 process information as they perceive risks and
4 as they make decisions. And I'm particularly
5 interested in issues of affect and emotion,
6 numeracy, and aging.

7 DR. LESAR: Good morning, I'm
8 Timothy Lesar. I'm Director of Clinical
9 Pharmacy Services at Albany Medical Center in
10 Albany, New York.

11 DR. KHANNA: Hello, my name is
12 Prerna Mona Khanna. I'm a physician, triple-
13 Board certified in Internal Medicine, Public
14 Health, and Occupational Medicine. I've been
15 a full-time medical journalist for the past
16 seven years where I try to raise health
17 literacy, particularly in areas of health
18 disparities. I'm an emergency medical aide
19 volunteer through the National Disaster
20 Medical System in the Texas State Guard where
21 I hold the rank of Lieutenant Colonel and I am
22 not married.

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1 DR. SLEATH: My name is Betsy
2 Sleath and I'm a Professor of Pharmaceutical
3 Outcomes and Policy at the University of North
4 Carolina, Chapel Hill.

5 MS. FINCH: Good morning, Sokoya
6 Finch, Executive Director of Florida Family
7 Network. Our focus is on health disparities
8 among the underserved and uninsured, also with
9 the focus on health literacy.

10 I am a mother of three.

11 DR. WOLFE: I'm Sid Wolfe. Like
12 our first two speakers, I'm a general
13 internist and I've been the Director of the
14 Health Research Group of Public Citizen for 37
15 and a half years. I'm on the Drug Safety and
16 Risk Management Advisory Committee. I have
17 five grandsons and four daughters.

18 DR. BRUHN: Good morning. I'm
19 Christine Bruhn. I'm a specialist with the
20 University of California at Davis. I'm in the
21 Department of Food Science and Technology, the
22 Director of the Center for Consumer Research.

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1 My research and educational programs look at
2 consumer attitudes and behavior toward food
3 safety and nutrition. I have two children,
4 two grandchildren and photos. Thank you.

5 DR. FISCHHOFF: Let me introduce
6 and welcome, I'm honored to welcome our first
7 speaker, Dr, Jeffrey Shuren, the Associate
8 Commissioner for Policy and Planning at FDA.
9 Thank you for joining us.

10 DR. SHUREN: Good morning. Well, I
11 would tell you whether or not I'm married,
12 unfortunately, you need to submit a FOIA
13 request first.

14 Let me start with an apology
15 because I had planned to stay for the morning
16 and unfortunately I need to leave after the
17 first presentation and it's embarrassing
18 because I'm about to give remarks that are to
19 thank you about all the great work you do and
20 how important you are to the FDA, and then I'm
21 going to go back to the first row and after
22 the first presentation, I'm going to embarrass

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1 myself by getting up and walking out the door.

2 So my apologies, but I hope you understand
3 it's been a relatively busy week in
4 Washington.

5 The Risk Communication Advisory
6 Committee not only marks its first anniversary
7 of its first public meeting which took place
8 one year ago tomorrow, but it also can look
9 back on a very successful year. And for that,
10 I would like to thank and congratulate the
11 Committee Members for their commitment and for
12 their contributions. And I look forward to
13 your continued positive impact on the Agency
14 and on public health in the coming year.

15 You have provided this Agency with
16 very important feedback. And this morning,
17 what I'd like to do is to return the favor and
18 to talk about the impact you have had on the
19 Agency over the prior year. So starting back
20 at the first Advisory Committee meeting and
21 there were actually three of them last year.
22 This is now the fourth meeting in one year

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1 which is very, very impressive. But at that
2 first meeting we talked about an overall
3 vision for the Advisory Committee and we
4 presented to you all a template for a recall
5 press release. And out of that Advisory
6 Committee meeting we revised that template
7 based on your comments. And we're now working
8 through a process to sort of get that cleared,
9 but I think even more profound is you
10 recommended to us that we need to pretest our
11 messages. And we took that to heart and what
12 we've done is we are in the process of
13 creating an infrastructure and a process
14 inside the Agency for pretesting and we're
15 currently setting up to pilot that.

16 What we're, in fact, doing is
17 setting up an internal network of government
18 employees who would serve as reasonable
19 surrogates for the target audience for
20 specific FDA communications. And this will
21 allow us to pretest our messages to help
22 enhance the overall quality and effectiveness,

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1 but do it in a way that doesn't delay our
2 ability to issue those communications in a
3 timely manner.

4 At the second meeting on May 15th
5 and 16th, we discussed two topics that were
6 under the Food and Drug Administration
7 Amendments Act and the first we discussed
8 direct-to-consumer advertising including how
9 it relates to communicating to subsets of the
10 general population, such as the elderly,
11 children, racial and ethnic minority groups,
12 and increase access to health information and
13 decrease health disparities for these
14 populations.

15 As a result of that, we have been
16 collecting information and comments. We've
17 been reviewing public research and we're soon
18 going to be starting work on drafting a report
19 to Congress. And the feedback from this
20 Committee has helped us focus our work.

21 Second, we discussed studying the
22 appropriateness of including in televised

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1 direct-to-consumer advertisements, a statement
2 encouraging consumers to report negative side
3 effects of prescription drugs to MedWatch and
4 as is currently required for print, direct-to-
5 consumer prescription drug ads. And what we
6 have done is we have made modifications to our
7 study design based on your input and we are
8 currently making additional revisions to the
9 study based on comments we receive to a
10 Federal Register notice that we published at
11 the end of November.

12 And at the third meeting on August
13 14th and 15th, you passed a set of
14 resolutions. And let me just quote two of
15 them. "FDA should consider risk communication
16 as a strategic function to be considered in
17 designing its core processes. And FDA should
18 engage in strategic planning of its risk
19 communication activities." That resounded
20 very strongly within the Agency.

21 And first what we did is we
22 established a communications council. It's an

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1 internal management committee that's formed
2 partly in response to these discussions and it
3 continues to provide intra-agency
4 communication and coordination of risk
5 communication activities.

6 Secondly, we received funding in
7 the Fiscal Year 2008 supplemental budget that
8 now is allowing us to hire additional staff
9 with social and behavioral science expertise,
10 and allows us to make additional investments
11 in risk communication-related research.

12 Secondly, with that money, one of
13 the main commitments on the part of the Agency
14 is to develop a risk communication strategic
15 plan and drafting of that plan is underway and
16 our goal is to have that completed by the end
17 of the fiscal year.

18 A key piece of that plan we expect
19 to be is that we are a science-led agency and
20 therefore social and behavioral science should
21 lead us in the development of communications
22 with the public. The impact of these and

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1 other Committee actions over the prior year
2 has raised the profile of risk communication
3 in the Agency amongst both managers and staff.

4 So in summary, we are in the
5 process of incorporating your advice by
6 developing and implementing new processes,
7 increasing internal cross agency coordination
8 and planning for risk communication, and both
9 committing to and executing strategic planning
10 for risk communication. We see these as very
11 positive developments.

12 So on behalf of myself and the
13 Agency, I thank you for your commitment, your
14 insight and your advice and we look forward in
15 the coming year to be one of continued growth
16 and maturation of our risk communication
17 activities. So thank you.

18 DR. FISCHHOFF: Thank you very
19 much. Thank you for coming and thank you for
20 providing the feedback. We're here to serve.

21 Thank you.

22 Let me introduce our first two

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1 speakers. And so in the spirit of your
2 remarks, we're going to be hearing the science
3 of how to extract the information that's
4 relevant for decisions from the fire hose of
5 technical information that one could
6 theoretically provide to people to talk about
7 the research base for how successful different
8 techniques are in ensuring that people have
9 the science they need. And then continuing
10 from our meeting of last May to talk about how
11 to ensure that information that's -- one has
12 the best available information for most of the
13 public, how do we ensure that we then -- how
14 do we make certain that it then reaches people
15 for whom it's not suited or more difficult to
16 reach. So we'll have those three bits of
17 science. And then by the end of the day
18 today, hopefully we can provide some
19 conclusions and perhaps some recommendations
20 on how to work in this area providing useful
21 consumer medical information. Thank you.

22 Our first speakers are Dr. Lisa

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1 Schwartz and Dr. Steven Woloshin from the
2 Outcomes Group at the VA Medical Center in
3 White River Junction, Vermont and Dartmouth.

4 DR. WOLOSHIN: Great, thank you
5 very much. It's a real honor for us to be
6 here and we thank Dr. Fischhoff and the
7 Committee for inviting us.

8 I'm actually Steve and that's Lisa.
9 And we're married to each other. We have a
10 very simple model of decisionmaking. We think
11 that to make good decisions people need facts
12 and you need values. So what I mean is facts,
13 people have to know their options and the
14 likely outcomes of their choices and they need
15 some clarity about their values, how much they
16 care about these things. And then if you
17 integrate these things, you can get to good
18 decisions.

19 The problem, of course, is what
20 happens when you don't have facts. And
21 without the facts, this whole model falls
22 apart. You can't get to good decisions. And

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1 the problem is that people often don't have
2 the facts. And this is particularly true with
3 respect to prescription drugs.

4 In the past, people were not the
5 intended audience for drug facts. This is a
6 quote from the legislation that helped create
7 the FDA. This is a real quote. "Information
8 in drug labels should appear only in such
9 medical terms as are not likely to be
10 understood by the ordinary individual." Okay.

11 Now, of course, that's an old
12 regulation. That's back in 1938 and a lot has
13 changed since then. Of course, people are
14 now, consumers are now the intended audience
15 for lots of drug information. And the most
16 obvious example of this, of course, are drug
17 ads, direct-to-consumer drug ads.

18 This is an ad for Lunesta which is
19 a sleeping pill for chronic insomnia. And
20 this is the most heavily advertised drug in
21 2007 and what it says is it says "Lunesta not
22 only helps more people fall asleep fast, it

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1 helps you sleep all through the night." So it
2 tells you what the drug is for, but it doesn't
3 tell you the most important thing, how well
4 the drug works. So, there's an assertion of
5 efficacy, but there's no data at all.

6 Now I'm not just picking on
7 Lunesta. We did a content analysis of drug
8 advertisements that appear in popular
9 magazines. This was published in The Lancet a
10 few years ago and we found that this is the
11 rule, not the exception. Efficacy is usually
12 asserted with just vague, qualitative
13 statements. The drug works. Only 13 percent
14 of the ads presented any data supporting the
15 claim, and when they did it was usually done
16 in a format that exaggerates the magnitude of
17 the effect. Relative risk reductions without
18 absolute risk. So for example, the drug cuts
19 your change of heart attack by 50 percent, but
20 they don't tell you 50 percent of what.

21 Of course, drug ads are more than
22 just the front page. They're also the brief

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1 summary. And this is the brief summary for
2 Lunesta. And there are no data here about
3 efficacy at all, and there never are. Brief
4 summaries don't have information about how
5 well the drug works. They often have data on
6 harm. This one happens not to have any
7 numbers, but often they do.

8 I know the medication guide was a
9 topic of discussion at this meeting, so we
10 look at the Lunesta medication guide, and once
11 again, there's no data on efficacy at all. So
12 there are also no data on side effects either.

13 So again, consumers won't have a chance to
14 learn how well the drug works looking at this
15 document.

16 Here's the currently approved label
17 for Lunesta and this is a big document, it has
18 lots of stuff. If you look -- it even has
19 molecules on it. But what it doesn't have is
20 the data on how well the drug works. There is
21 a section and the labels always have the
22 section about clinical trials. And it

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1 summarizes the data that were provided to the
2 FDA and the decision to approve the drug for
3 this indication.

4 And here's the summary. Actually,
5 this is the only statement of efficacy.
6 "Lunesta was superior to placebo on subjective
7 measures of sleep latency, total sleep time,
8 and" something called "WASO." So there's no
9 data, right? It tells you that the drug is
10 better than a placebo, but it doesn't tell you
11 how much better. So again, no data. There's
12 lots of information about side effects in the
13 document, but nothing on efficacy.

14 The only place you can get the
15 information that I want to see, that we want
16 to see, how well the drug works is the FDA
17 review documents. This is the one for
18 Lunesta. This is a 403-page document, right.

19 It's a treasure trove. These are amazing
20 documents, but of course, there's no free
21 lunch. They're really hard to slog through
22 and they're not structured in a uniform way

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1 and they're hard to search, but if you work at
2 it, you can find what you want. In fact, on
3 page 306 in an appendix table, there's actual
4 data that tells you how well the drug works.
5 And you can't see the numbers, but if you
6 wanted to you could find out how well the drug
7 works.

8 So how can we do a better job
9 making sure that this kind of information sees
10 the light of day. How can we get these facts
11 to the consumers?

12 Well, here's a great way to do it.
13 Okay? And this is -- the precedent is the
14 FDA's nutrition facts box which is just a
15 table that's meant to help consumers make
16 decisions about food products. And this is a
17 table with numbers, with data, not on how well
18 the cereal works, but on the contents and
19 nutritional information. And we think if you
20 can do this for Cocoa Krispies, right, if you
21 can provide consumers with data, why can't you
22 do it for Lunesta?

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1 This is Washington and I know now
2 everyone says yes, we can and yes, we can.
3 This is our attempt at it. This is what we
4 call the prescription drug facts box and what
5 this does is it's got a number of sections.
6 It has descriptive information at the top
7 about who should take the drug and what you
8 need to do. But the heart of the box is the
9 simple tabulative display of quantitative
10 information. It summarizes the best data
11 about how well the drug works, data that FDA
12 used to approve the drug.

13 And there's information on benefits
14 or how well the drug works. It tells you what
15 is the chance of the outcome for Lunesta,
16 treatment chronic insomnia, if I take the drug
17 or if I don't take the drug? And it does the
18 same thing for side effects. What's the
19 chance of different problems if I do or do not
20 take the drug?

21 And then there's also a part at the
22 bottom which we call the new drug warning

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1 which tells you when the drug was approved and
2 it just reminds consumers that the most
3 reliable way to look at the long-term safety
4 of a drug is its track record over time.

5 So what we're going to talk about
6 now is a progress report on the drug facts
7 box. And we're going to describe four studies
8 we have done testing the box and then we're
9 also going to talk about some work we've done
10 at trying to implement the box at FDA.

11 I'm going to start at the
12 beginning. We came up with this idea in about
13 2002. We were very excited and we actually
14 called Dr. Fischhoff to get advice from him
15 about what to do and he referred us to DDMAC
16 at the FDA, the Division of Drug Marketing,
17 Advertising, and Communications, and their
18 reviewers have responsibility for reviewing
19 prescription drug advertising and promotional
20 labeling. So we spoke to people at DDMAC and
21 they invited us to come down to FDA and we had
22 a meeting with 20 officials where we presented

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1 our idea.

2 And they really liked the drug box
3 idea. But they challenged us to show that
4 consumers really want value and understand
5 benefit data. And so they challenged us to do
6 some studies and that's what we did. So I'm
7 going to tell you about the first one.

8 The first one we called it the
9 Boston Study and what we did here is because
10 FDA officials were most focused here on what
11 was new about the box and what was new was
12 presenting benefit information, so this study
13 just focused on the benefit portion of the
14 box. And the study had 203 participants. We
15 had professional interviewers from the Center
16 for Survey Research at the University of
17 Massachusetts, knock on doors in the Greater
18 Boston Area and invite people to participate.

19 They were shown drugs with and without these
20 simple boxes and just the simple portion of
21 the box. They were interviewed. The
22 interviewers oriented people to the box. They

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1 asked people how they liked it. And then they
2 had them perform simple comprehension tests to
3 make sure that they understood the
4 information.

5 And I'm just going to show you one
6 key finding. After seeing a bunch of drug ads
7 with and without drug boxes we asked people
8 would you prefer to see this add with or
9 without the drug facts box? So a few people
10 said they preferred to see the ad without it.

11 And then there were a few people who had no
12 preference. But the vast majority either
13 slightly or strongly preferred the ad with the
14 data on benefit data.

15 So this study, the complete results
16 are available. It was published in health
17 affairs. It's called "The Value of Benefit
18 Data in Direct Consumer Drug Ads." And the
19 conclusion is that most people we interviewed
20 want benefit data in drug ads, can understand
21 these data and are influenced by them.

22 The next study we did is called the

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1 Vermont Study and here we looked at the drug
2 tamoxifen, Nolvadex. And here, the indication
3 is primary prevention of breast cancer. So
4 this is a drug that prevents something real
5 important, but there are a lot of side
6 effects, so there are a lot of trade offs
7 here. And this study had 274 participants.
8 Here we tested the entire drug box, not just
9 the benefit part, but the whole thing. So
10 it's a much more complex box. It had a table
11 with nine rows and two columns of data. There
12 were no instructions or training on how to use
13 the box, so we tried to see what it would be
14 like in real life if people were just seeing
15 this on their own. And there were much more
16 demanding comprehension tasks.

17 And this paper was published in
18 Medical Decision Making. The drug facts box
19 providing consumers with simple tabular data
20 on drug benefit and harm. And the conclusion
21 was that most participants, even those with
22 lower formal education were able to understand

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1 it and use the tabular data display.

2 So having done these preliminary
3 studies, we decided it would be important to
4 do a gold standard trial, to generate the
5 highest quality of evidence in the target
6 audience, U.S. consumers. So we did a
7 nationally representative -- we obtained a
8 nationally representative sample of American
9 adults aged 35 to 70 through random digit
10 dialing, again, using a professional survey
11 firm. People were asked if they would
12 participate in the study. If they did they
13 were randomized to either get two ads with
14 drug facts boxes or the same two ads with the
15 standard brief summary.

16 And now Lisa is going to tell you
17 what we found.

18 DR. SCHWARTZ: Thank you. So the
19 first of these national trials was called the
20 Symptom Drug Box Trial. This included 231
21 people and this was a real-world challenge.
22 What we wanted to do was show people ads for

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1 two drugs that were treating the same
2 condition, heartburn. The two ads that we
3 used were for Amcid, an H2 blocker and Maxtor,
4 a PPI or proton pump inhibitor. And these are
5 real ads for real drugs, but we changed the
6 name of the drugs and gave them fake names so
7 that people wouldn't have preconceived notions
8 about how well they worked.

9 People just saw the names of the
10 drugs. I'm just providing the classes of the
11 drugs so then everyone can understand what
12 these drugs are, since they're fake.

13 The drugs have similar side
14 effects, but one is substantially more
15 effective. So we wanted to pick two drugs
16 where there was clearly a right answer. And
17 that led to our primary outcome in this study,
18 was could people choose the objectively better
19 drug, the drug that worked better where side
20 effects were the same?

21 So in this study, people were
22 randomized for the control group and if they

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1 were in the control group, they received these
2 ads and the standard brief summaries. The
3 only thing that was changed was the name of
4 the drug to the fake name.

5 And the drug box group received the
6 exact same front page of the ads, but the
7 second page were drug facts boxes. And then
8 we asked them questions. And this is one of
9 the questions: "in your opinion, how does
10 Maxtor compare to Amcid in relieving
11 heartburn?"

12 Now this is a pretty hard question
13 for the control group to answer because as is
14 typically the case, there is no efficacy data.

15 So it's really hard to know how well the drug
16 works. And you can only form that opinion
17 just based sort of on the advertising
18 techniques. But in the drug box group, people
19 have a chance to really answer this question,
20 because they can look at the efficacy data
21 provided in the relevant part of the box and
22 compare the two drugs.

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1 And when you compare the data, you
2 can see that Maxtor is a lot more effective.

3 And eight percent of the control group were
4 able to correctly answer the question that
5 Maxtor was a lot more effective. But 70
6 percent of the drug box group having access to
7 that data could correctly answer that
8 question.

9 Then we asked about side effects.
10 "In your opinion, how did the side effects of
11 Maxtor compare to Amcid?"

12 Now again for the control group
13 this is a difficult question for a different
14 reason, because they have so much information.

15 There is a lot of information here about side
16 effects and sometimes it's confusing because
17 sometimes the side effects don't even occur
18 more often in the drug group than in the
19 placebo group.

20 In the drug box group, people can
21 look at the relevant section of the side
22 effects part of the box and compare them and

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1 they were able to see that the side effects
2 are about equal. And 38 percent in the
3 control group were able to answer this
4 question, compared to 80 percent in the drug
5 box group.

6 And now we get to our primary
7 outcome which is the choice between the two
8 drugs. "Imagine you had bothersome heartburn,
9 if you could take either Maxtor or Amcid for
10 free, which drug would you rather take?" And
11 we're looking at the percent choosing Maxtor,
12 which is clearly the right answer because it's
13 the drug that works substantially better and
14 the side effects are the same. And 31 percent
15 of people in the control group answered this
16 correctly, compared to 68 percent in the drug
17 box group. So people could really make sense
18 of this information and get to the objectively
19 correct answer. And that's hard. You're
20 comparing two data tables. That's a pretty
21 complex task.

22 The second randomized trial was the

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1 Prevention Drug Box Trial. And this included
2 219 people. And here we used two drugs that
3 are used to reduce the risk for future events
4 that are important, but relatively rare. And
5 our motivation for this trial was to make sure
6 that people didn't dismiss what are
7 numerically small differences on very
8 important outcomes like having a heart attack
9 or dying.

10 We used current ads for a statin
11 which we gave the fake name of Concor and
12 clopidogrel which we called Pridclo for
13 preventing second heart attacks. And here,
14 the primary outcome that we asked was does the
15 box result in more accurate perceptions of
16 drug benefits and side effects?

17 So again, the control group
18 received both ads, but the second page was the
19 standard brief summary. In the drug box
20 group, they received the same two ads and the
21 second page was the drug facts box. And the
22 first question was about benefits, so here

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1 we're seeing what the perceptions were about
2 how much Concor, the statin, lowered the
3 chance of having a heart attack compared to
4 the placebo group.

5 The correct answer is .8 percent.
6 And as you can see, these are the answers from
7 the control group. They substantially over-
8 estimated the benefit of the drug. And not
9 surprisingly because the drug box group had
10 this data in front of them, they were much
11 more accurate.

12 The second question was about side
13 effects. "How would you describe the side
14 effects of Concor for people with heart or
15 vascular disease?" And here are the control
16 group's answers. And when you compare them to
17 the drug box answers, what's interesting is
18 that the drug box group correctly sees the
19 side effects as smaller because in the box,
20 Concor is a very safe drug and what you see in
21 the drug box group is many more people in the
22 drug box group rated the side effects as none

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1 or very small, compared to the control group.

2 And then we asked people to put
3 this together, to make an overall judgment.
4 Are the benefits of Concor worth the possible
5 side effects for people with heart or vascular
6 disease? In the control group, 86 percent
7 said yes. And in the drug box group, 72
8 percent said yes. And this was reassuring to
9 us. What it says is that even though people
10 dramatically over-estimated the benefit, even
11 when we corrected that, nearly three quarters
12 of people could still appreciate that there
13 was an important reduction in risk.

14 So I'd like to point out some
15 caution about our work. While comprehension
16 was high, the information in the box was
17 clearly not accessible to everyone. But what
18 was encouraging when we looked among
19 participants who had the lowest formal
20 educational attainment, the box still seemed
21 to work very well.

22 The second is that the trial tested

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1 drug boxes in only four direct-to-consumer
2 ads. If other ads communicated outcome data
3 better, the effect of the box would be
4 reduced.

5 This paper was just published in
6 The Annals of Internal Medicine,
7 "Communicating Drug Benefits and Harms With
8 the Drug Facts Box, Two Randomized Trials."
9 And our conclusion from both of these studies
10 was the drug facts box improved U.S.
11 consumers' knowledge of prescription drug
12 benefits and side effects. It resulted in
13 better choices between drugs for current
14 symptoms and corrected the over-estimation of
15 benefit in the setting of prevention.

16 I'd like to finish up by talking
17 about our effort trying to implement the box
18 in the FDA. And I'd like to start off with
19 the big picture of how we think the drug box
20 could help. So let's remember what Steve
21 said. The FDA- reviewed documents are a
22 treasure trove, a wealth of information, both

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1 about efficacy and safety. And then these
2 large documents are condensed to the FDA-
3 approved label. And then there's a further
4 excerpting which occurs in the direct-to-
5 consumer brief summary or in the Med. Guide.
6 By the time that this information gets to
7 doctors and patients, unfortunately, important
8 information is lost.

9 We think the drug facts box would
10 be great to have in an office visit. It would
11 make it feasible or possible for doctors to
12 discuss the data about prescription drugs with
13 their patients. We also think that the drug
14 facts box could be useful prior to the visit
15 if it were to replace the brief summary on
16 direct-to-consumer ads. But we were asked to
17 present this work at an Institute of Medicine
18 workshop prior to the report to the FDA and we
19 met an FDA official who suggested an earlier
20 role for the box, up here, in the review
21 process, and having the medical reviewers who
22 are doing the reviews write the drug boxes.

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1 And this is just an incredibly good idea.

2 The reviewers are independent
3 clinician experts who know the drugs better
4 than anyone else having spent up to a year
5 reviewing all of the data for the drug. They
6 have access to the totality of published and
7 unpublished data at the time of drug approval.

8 And we think that the drug facts
9 box could promote structure in both the review
10 documents and the label by highlighting what
11 is missing, which in the case of Lunesta was
12 efficacy data that wasn't in the label. Most
13 of the time there probably is efficacy data in
14 the label, but it just shows that it's
15 variable. Highlight what is known and create
16 a hierarchy for dealing with multiple side
17 effects which is an issue that we face in all
18 labeling.

19 So I'm excited to say that we have
20 been working on a pilot project with the FDA.

21 For two years, we were working with Paul
22 Seligman and Judy Racoosin in the FDA's Office

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1 of Safety Policy and Communication and the FDA
2 medical reviewers to produce ten FDA drug
3 facts boxes for different drugs for different
4 challenges because we recognize, there's a lot
5 of complexity to writing these boxes.

6 And through writing the boxes, we
7 have been working on developing a transparent,
8 replicable process for making the drug boxes a
9 routine FDA product. And in fact, we're now
10 on the fourth iteration of this 20-page
11 handbook to try to develop that kind of
12 process to make the many decisions that are
13 required about which studies to present, which
14 outcomes within those studies and so on.

15 So I want to say that the FDA
16 reviewers that we worked with were just
17 wonderful and they were very enthusiastic.
18 Their clinicians, who felt like this was a
19 great thing for them to be doing, to
20 communicating what they know to the public.

21 Unfortunately, right now, as far as
22 we understand, this is on hold, that the FDA

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1 hasn't decided what's going to happen with
2 this project, I guess in light of some of
3 these larger decisions.

4 So I'd like to end with our
5 recommendations. We think the FDA should
6 start producing drug facts boxes as part of
7 the review process for new drugs now, either
8 in a stand-alone form or as part of other CMI
9 efforts that it decides to take on.

10 Consumers want and understand data
11 on drug efficacy and side effects as presented
12 in drug facts boxes, and no one is better
13 positioned than FDA reviewers to rate those
14 boxes.

15 Drug facts boxes are an effective
16 way for the FDA to ensure that it communicates
17 what it knows about drugs to the public. And
18 we have just, if people are curious about
19 Lunesta, we have a drug box that we've made
20 that we'll hand out to the Committee, and if
21 you don't get a copy you can see yesterday's
22 New York Times, because they reprinted it.

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1 Thank you.

2 DR. FISCHHOFF: Thank you very
3 much. And so we have now about 20 minutes for
4 questions and answers, and since everybody
5 speaks, it's always the same old hands around
6 here. Let's start with Christine, Sid,
7 AnnaMaria, did you have your hand up? Okay,
8 Christine, Sid.

9 DR. BRUHN: Thank you. That was
10 really a very good report and I appreciated
11 reading the materials in the packet as well
12 before coming. Were you able to identify any
13 characteristics among those who did not
14 respond correctly on your surveys on the drug
15 facts? Were you able to identify that a
16 particular segment was -- or what did you --

17 DR. SCHWARTZ: I mean in general,
18 as you would expect, that the rates of being
19 correct were lower among people with less
20 formal education. But the box still took them
21 from a lower level to a higher level.

22 We haven't done more subgroups. We

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1 actually were just working really hard to get
2 this paper, hoping to do the revision to get
3 it published before the Committee meeting
4 which we were very happy, but we haven't. We
5 will look at that, but we haven't.

6 DR. WOLFE: Wonderful presentation.

7 I have been aware of this for a while. I
8 certainly encouraged it and still do. Just a
9 couple of questions. One, in terms of the
10 statin example, yesterday we had talked in a
11 different context about the difference between
12 primary and secondary prevention. And whereas
13 the risk of statins are probably constant from
14 primary to secondary prevention, the benefits
15 are clearly reduced, and particularly if you
16 have no risk factors, there may be almost no
17 benefits.

18 So just to cut to the chase, would
19 you envision for a drug that is widely used in
20 two different populations like this, having
21 two different boxes? I assume that's the
22 answer, but let me hear from you.

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1 DR. WOLOSHIN: You're absolutely
2 right. The basic principle of the drug box is
3 to let people see the benefits and the side
4 effects together so they can weigh them and
5 decide whether it's worth it. And the basic
6 principle of the box is one box per
7 indication. So if a drug is approved from
8 primary prevention, then the data in the box
9 will reflect that. And if it's for secondary
10 prevention, reflect that. So there will be
11 two different boxes.

12 DR. WOLFE: And the box you showed
13 was essentially the secondary prevention box.

14 DR. WOLOSHIN: Yes.

15 DR. WOLFE: The other question, as
16 you mentioned, we actually published a study
17 about this, is about how rapidly after a drug
18 is approved it may get into trouble with
19 either a black box warning that wasn't there
20 at the time of approval. There was a paper in
21 the JAMA a few years ago, or a withdrawal.
22 And your figure of five years is very much

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1 along the lines of what we had found.

2 So the question has to do with
3 revision. At the time a drug is approved,
4 you've got essentially randomized control
5 trial data for efficacy, under-powered data
6 for safety as we discussed. Sometimes you
7 just say we don't know about this at all.

8 DR. WOLOSHIN: Right.

9 DR. WOLFE: But how would you
10 envision the changing of this facts box as new
11 information comes up? Essentially, most of
12 what happens is in the first five or seven
13 years, so a substantial proportion of drugs
14 are going to have new information which would
15 alter the box. So what is your thought as to
16 how this should be stayed on top of and
17 changed?

18 DR. SCHWARTZ: Right, well, we
19 thought that there would be dates on the box.

20 That was part of the review, that there would
21 be dates and they would have a routine every
22 time there was some new post-marketing

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1 surveillance, it would need to be updated.

2 We actually, the boxes, as we've
3 done more boxes with reviewers, we've added
4 more elements to the boxes because there's
5 other issues, like let's say you have a drug
6 within a class and it doesn't show that
7 particular side effect that is known for that
8 class of drugs and so we've also developed a
9 way to sort of put in a general statement for
10 the class of drugs, even though it wasn't
11 observed in this particular study.

12 So there are many and you know,
13 you're picking up on some of those challenges,
14 issues, but we think they're solvable with the
15 sort of thought out procedure about how to do
16 that.

17 DR. WOLFE: Just a quick follow-up,
18 were the FDA medical officers that you met
19 with willing to sort of in fast, real time
20 make these kinds of changes? To the extent, I
21 think your idea is excellent, trying to
22 internalize this in the FDA, because in the

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1 outside it's not possible to do this in a
2 consistent way. But were they willing in as
3 rapid a period of time as possible, to make
4 these kinds of changes when and if they needed
5 to be made?

6 DR. WOLOSHIN: Well, in the pilot
7 project these guys were contributing their
8 time and so they were very enthusiastic and
9 they felt strongly that they would want to do
10 it, but that would be -- how it would actually
11 be implemented for real, I don't know.

12 DR. SCHWARTZ: And we do, I mean we
13 have a grant from the RWJ Pioneer to try to do
14 that, but that project is now on hold to do it
15 in real time. That's what -- our desire was
16 to try it in real time. But the reviewers, we
17 had a meeting with them and they all did boxes
18 and after our meeting they all revised the
19 boxes and sent them back to us. There was
20 just -- and they were very interested in
21 developing this rule book because you know, we
22 had people from different divisions and there

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1 are many division-specific issues and so --
2 but we were just so surprised that their
3 engagement -- I mean in the beginning, Paul
4 wasn't sure whether the reviewers would want -
5 - of course, these are volunteer reviewers.
6 But he was just very impressed after drafting
7 the boxes that they really liked doing it and
8 didn't see it as onerous.

9 DR. WOLOSHIN: We can give you a
10 copy of that. What we hoped was that then --
11 now that we have this review book that's been
12 through all these iterations, to get some
13 external review of it and then try a pilot
14 project where new drugs are -- facts boxes are
15 produced for new drugs.

16 DR. PETERS: Great presentation. I
17 just love the idea of this drug facts box. I
18 think it's wonderful and I think the steps you
19 guys have taken towards internalizing it is
20 just such a terrific idea.

21 I did have a question on the latest
22 study that you guys just had come out in The

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1 Annals. I actually was a little surprised at
2 how -- so there was a much better result when
3 you used the drug facts box compared to when
4 you used the control. But I was actually kind
5 of surprised at how low it was in terms of
6 imagine you had bothersome heartburn, if you
7 could take either one for free, which drug
8 would you take? And about 68 percent of the
9 people in the drug facts box condition chose
10 the correct drug.

11 So a couple of questions: one, I
12 would guess that the worst drug probably had a
13 better ad, so if you had a -- it was a more
14 compelling ad or something like that. That's
15 one question I had. And then just to follow
16 up on that, have you thought about ways to
17 make the drug facts box even better?

18 DR. WOLOSHIN: Just one thing, 68
19 percent versus 31 percent, but then there are
20 also some people that said they would take
21 neither drug which we think is an important,
22 really important finding also because people

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1 look at the data and they may say, you know,
2 it's not worth taking any drug. And we think
3 that's an important finding as well.

4 DR. SCHWARTZ: And it's about 20
5 percent, so there are some people who are
6 taking neither, so what we're saying is we
7 felt that when we developed the survey that we
8 had to give the neither option, that we
9 couldn't force a choice. And so part of that
10 is a reflection of the neither because it's
11 about 20 percent who chose neither drug.

12 DR. WOLOSHIN: And the other
13 questions about the ad, you're right. I mean
14 the ads, I guess as a professor of marketing
15 here, the ads are -- people work really hard
16 to make their ads compelling. We didn't
17 choose the ads
18 -- we didn't think about how compelling the
19 ads were. We just chose current ads that we
20 found for these drugs. And we said about the
21 limitation, better ads might have different
22 effects. We don't want to leave it up to the

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1 quality of the ad or the picture. We want to
2 get people the data.

3 DR. SCHWARTZ: And in terms of
4 making it better, I'm sure it can. As we
5 start -- the more you do them and the more you
6 test them, we've refined it over the four
7 studies that we've done. It's changed each
8 time and so I'm -- certainly there's room to
9 be better, but I think we've done enough work
10 now to say this general format is pretty good
11 for most people. Maybe not everybody.

12 DR. PETERS: I would completely
13 agree with you. I don't mean this to say I
14 think there's anything wrong with it. I think
15 this is a terrific idea.

16 I was looking at it more from the
17 standpoint of have you tried different ways of
18 presenting the numeric information that might
19 be better understood by some of your low
20 education populations? Have you tried
21 different formats? That was more my question,
22 or thought about trying in the future.

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1 DR. SCHWARTZ: What we did
2 originally -- we've had this debate between
3 percents and frequencies and how frequencies
4 may be more important when the percents are
5 very low, when they're less than one percent.

6 And so we have some ideas of testing the
7 different formats to try to get order of
8 magnitude may be better with the frequencies,
9 trying different -- maybe if things are above
10 one percent. But we haven't tested those
11 things yet, but there's certainly room.

12 DR. LESAR: I think this is
13 terrific. My question pursues a little about
14 what Sidney was asking about if drugs have
15 multiple indications. I see this as
16 particularly effective when you've have a
17 direct-to-consumer advertisement which is
18 typically targeted to a specific indication or
19 small range of indications.

20 Do you see this -- we had lots of
21 discussion about this yesterday, about the
22 CMIs, drug guides, whatever. And certainly

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1 this type of information is critical.
2 However, when you get to the point where
3 you're giving it in the pharmacy where you
4 transfer that information, we seldom know what
5 the indication is for a drug, let's say like
6 Cymbalta, which might have widely varying, or
7 Lyrica, a good example, that have growing
8 indications.

9 And those boxes are going to look
10 very, very different. And have you tried to
11 mock one up that had those type of things?
12 Not so much when you know what the isolated
13 indication is, but when you have multiple
14 indications in that kind of setting where the
15 pharmacist would be handing information to
16 someone and how would you differentiate
17 between the indications so someone could
18 identify which box relates to me.

19 DR. WOLOSHIN: That's a great
20 question. So just to reiterate, one box per
21 indication. Now how to operationalize that in
22 the pharmacy is a great question.

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1 DR. SCHWARTZ: At one point we
2 talked about actually changing the title in
3 the box to make it clear that the title was
4 this drug for this indication and we sort of
5 played around with that to make it clear that
6 it's not just the drug, but -- and so that you
7 could imagine that you may have, there could
8 be like an introduction that said if each box
9 relates to the different condition, but making
10 that clearer in the title of the box, that's
11 one thing we've thought about.

12 DR. WOLOSHIN: It raises a great
13 issue. Maybe doctors should specify what the
14 indication for the drug. That's a great
15 question.

16 DR. BURLINGTON: Bruce Burlington,
17 industry representative to the Drug Safety
18 Committee.

19 I think this is a great idea. It's
20 exciting. Like all good ideas, has a lot of
21 complexity built into it. You really are
22 positing two uses for the information

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1 presented in the drug facts table. One of
2 them is within a drug or within a drug and an
3 indication comparing the effect size to the
4 safety profile, and in that we have to ask
5 about the complexity of the label is really
6 built around trying to understand how to
7 individualize risk assessment because the risk
8 and the side effect profile will be very
9 different for people with different
10 conditions. So the first part of the question
11 is how would you address that?

12 The second question is the second
13 use and that is you're comparing across drugs
14 or among drugs and there we have the
15 complexity that the clinical trials done to
16 support information and approval across drugs
17 are very different often. We rarely have
18 cross drug comparison data that are actually
19 scientifically sound and if we create a
20 situation in the future where companies get to
21 put information on effect size in the label,
22 they will be highly induced to change the

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1 situation of clinical trials to make things
2 better than they might be for the individual
3 consumer. So two questions.

4 DR. WOLOSHIN: We'll just do the
5 second one first. Your comment just speaks to
6 the need for comparative efficacy studies and
7 if one of the size effects of the drug boxes
8 that we get more comparative effect in the
9 studies, so we've had to have comparison of
10 drugs, so we got better drug boxes, then
11 great. I think that would be a terrific
12 thing. And now I've forgotten the first one.

13 DR. BURLINGTON: Where we don't
14 have that comparative data, I mean we have
15 thousands of drugs out there today. It's
16 unlikely that a huge number of them are going
17 to get actual high-quality, comparative
18 studies. What would be the reality of the
19 information we would be giving consumers to
20 make these product selection comparisons?

21 DR. SCHWARTZ: But I think most of
22 the time, I mean we did this because we wanted

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1 to have a complex cognitive task. Like we
2 wanted to set the highest bar that we could.
3 I think the most important first use is should
4 I take this drug, not which drug should I
5 take, it's should I take any drug or should I
6 take this drug.

7 The other thing that you're saying
8 about whether -- the generalizability from the
9 randomized trial, one of the things in the
10 study findings box is we want to specify
11 something so that people can get a sense about
12 whether they would have been in this study or
13 not, something about disease severity,
14 something about age, something that allows
15 people to -- so that it's clear these are the
16 numbers for this class of people and that's a
17 challenge to write that in a terse way, but at
18 least that's a first attempt to try to help
19 people make that judgment.

20 I guess the one other thing is the
21 idea is that making this information more
22 accessible is really important for doctors. I

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1 mean we're talking a lot about consumers, but
2 it's just not that easy for doctors to have an
3 easy synthesis of this information.

4 DR. FISCHHOFF: Lee and I are
5 wrestling with the time. We have a guest
6 speaker who is on the line from England now.
7 Welcome. Dr. Theo Raynor. So I think that
8 under the circumstances, there's obviously a
9 lot more discussion on this and -- but let me
10 thank our speakers for their presentations.
11 Let's go on to the other two presentations and
12 then if you're able to be with us for the rest
13 of the day, then we'll have other
14 opportunities to continue the exchange.

15 I believe -- will you be able to be
16 here through the afternoon?

17 DR. WOLOSHIN: Some of the
18 afternoon, definitely the morning, yes.

19 DR. FISCHHOFF: Okay, Lee and I
20 will wrestle with the schedule and thank you
21 again.

22 So I'm now pleased to introduce Dr.

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1 Theo Raynor, Professor of Pharmacy Practice at
2 the University of Leeds.

3 Dr. Raynor, do you have a -- can
4 you see us?

5 DR. RAYNOR: I can see you at the
6 moment, yes. Thank you.

7 DR. FISCHHOFF: And now we can see
8 you. Okay. Can you see -- anyways. I was
9 going to get recursive, but we can now see you
10 as well. So let me thank you for joining us
11 and give you the floor.

12 DR. RAYNOR: Thank you very much.
13 Well, I'm delighted to be taking part this
14 morning and apologize for not being able to be
15 there in person. I've just one hour ago
16 finished chairing a seminar, a week-long
17 seminar of researchers from our university and
18 the University of Sydney where we've been
19 working up further collaborations in research
20 on CMI.

21 Before I start, I'd like to say
22 hello to all my friends in the U.S. who have

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1 an interest in CMI, particularly Committee
2 Members Betsy and Terry.

3 I need to tell you that my slides
4 are going to be forwarded remotely in the
5 hall, so you have to forgive me for saying
6 "next slide."

7 We all know that much Consumer
8 Medicines Information is poor. We did some
9 focus groups with people with asthma in the
10 U.K. in the early part of this century and we
11 asked them about their medicines information,
12 what they thought about the leaflets they got
13 with their medicines. And so if we flip
14 through these five comments, then you'll get
15 the idea about what they did think.

16 They said things like "you throw
17 them away, don't you? They don't inspire you.

18 Things we want to know don't come first.
19 Priorities are those who wrote it, not
20 patients. People who suffer should help write
21 leaflets."

22 I'm just waiting to see whether

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1 you're going to see these on the screen.

2 So if we go on to the next slide
3 now, there's been patient focus research on
4 CMI in Europe and Australasia in the past 20
5 years which has been running in parallel with
6 what's been happening in the U.S. And I think
7 there are a significant amount of common
8 learnings. So I'm going to outline these
9 learnings today, looking at the research
10 evidence, the legislative environment, and
11 there will be three parts. The first will be
12 the current situation in Europe, as you can
13 see here.

14 The second will be the systematic
15 review of the research that we've undertaken
16 in the U.K., looking at English published
17 research worldwide. And then finally, I'll
18 talk about user testing, the process that's
19 been going on in Europe for the past three or
20 four years and the impact that it's had on the
21 quality of information.

22 So if we move on now, I just want

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1 to give you a little overview of the work that
2 we do in Leeds so that you can put what I'm
3 telling you into context. We've been running
4 a ten-year program funded by a variety of
5 funders, looking at things like the impact of
6 European Union legislation in user testing,
7 how best to express the risk and benefit of
8 medicines in CMI, and we've done an
9 international comparison between the U.K., the
10 U.S. and Australia which I'll mention in a
11 little while.

12 We're currently involved with the
13 University of Sydney on the I-CMI project, the
14 Improving CMI project and again, I'll mention
15 that later.

16 I do also have to declare that I'm
17 Executive Chairman of a university spinout
18 company, LUTO Research, Limited, which
19 provides a leaflet testing service for pharma
20 companies. And over the past four years we've
21 undertaken more than 12,000 participant
22 interviews as part of this testing process.

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1 So let's move on now to look at the
2 current situation in the European Union. If
3 we go on to the first slide, most medicines in
4 the U.K. and equally across the European Union
5 are supplied in original packs which
6 pharmacies relabel, so there's many more
7 repacking. There's a mandatory comprehensive
8 patient leaflet inside every pack. This is
9 written by the manufacturer according to
10 strict guidance. And leaflets for new
11 medicines must be successfully user tested for
12 a license to be granted.

13 I need to give you just a little
14 primer on the European Union. The European
15 Union and the United States are similar, yet
16 different, you might say. People from the
17 U.K. and France, for instance, will say
18 they're British or French and not European
19 which is obviously quite different to
20 yourselves in the United States. However,
21 contrasted with that, many areas of life are
22 subject to supra-national legislation, that's

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1 legislation across all 27 member states and
2 that includes medicines regulation. So what
3 I'm going to be talking about doesn't just
4 apply to the United Kingdom, it applies to all
5 27 states across the Union.

6 So if you go on to the next slide,
7 the first piece of legislation came into force
8 in 1999. Mandatorily it fits with all
9 medicines, as an insert, as I've mentioned.
10 And the wording used in the legislation was
11 that it should be full and comprehensible. So
12 that means it has to have all the information
13 in the PI, what we would call the SPC, but in
14 a form understandable to the patient. There
15 are mandated headings and the ordering of the
16 information is prescribed.

17 And at the same time in 1999, a
18 readability guideline was issued to help
19 manufacturers to write good leaflets and this
20 has been revised very recently. And the
21 contents of this guideline are fairly similar
22 to the FDA readability guidance on CMI that

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1 have been issued.

2 If we go on to the next piece of
3 legislation which was in 2005, in 2005, there
4 was a wide-ranging review of all EU pharma
5 legislation and that included a number of key
6 clauses related to CMI. Three of these I'll
7 mention: promoting the inclusion of more
8 positive or benefit information; the Braille
9 wording of the medicine name of every pack;
10 and the mandating of user testing.

11 So the wording legislation is that
12 the package leaflet shall reflect the results
13 of consultations with target patient groups to
14 ensure that it is legible, clear, and easy to
15 use. Manufacturers have to submit these
16 results with the other regulatory information
17 when a medicine is licensed. It applies to
18 branded, generic, and herbal licensed
19 medicines and it's usually interpreted as user
20 testing which I will explain shortly.

21 The key issue is that if you don't
22 have a successfully tested leaflet, then you

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1 won't get a medicine license and that's really
2 concentrated the mind of everybody in Europe
3 about the need for good CMI.

4 I mentioned that there was a set
5 order for the information and there is indeed
6 a leaflet template produced by the European
7 Medicines Evaluation Agency which they say the
8 templates used to ensure clarity, consistency,
9 and accuracy, of the medicinal product
10 information.

11 Now the template is guidance, but
12 in practice most people do follow it. We have
13 specified headings, specified subheadings.
14 These aren't comprehensive, but there are
15 subheadings for certain parts of the leaflets,
16 and this specific wording of fragments of
17 information throughout the leaflet. And if I
18 show you this, the next button will show you
19 that there are six parts to the leaflet. And
20 these are always in this order: what the
21 medicine is and what it's for; before you
22 take; how to take; possible side effects; how

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1 to store; and further information.

2 And then if we click on we will
3 find an example. I don't know how well you
4 can read this. This is part of the template
5 which refers to side effects. And you might
6 be able to see that the preamble is always
7 like all medicines, this medicine can cause
8 side effects, although not everybody gets
9 them. So that's the sort of wording that is
10 recommended as part of the template.

11 The important thing to note, that
12 although manufacturers have to test their
13 individual leaflets, the template itself has
14 never been tested.

15 I want to briefly talk about
16 Australia because it's Australia where the
17 process of user testing was first developed by
18 the Communications Research Institute.
19 They've always had a collaborative approach in
20 Australia and they have a number of groups,
21 including a QUART which isn't a subatomic
22 particle, but is the Quality Assurance

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1 Reference Group which represents all
2 stakeholders.

3 They also have a template which is
4 a three-column template and the leaflets are
5 printed in pharmacies as four sheets. And you
6 might get up to five sheets per drug depending
7 on the complexity.

8 Importantly, despite pharmacy
9 funding, these leaflets are still rarely
10 printed out for patients in Australian
11 pharmacies and the new study that I mentioned
12 earlier, the I-CMI project, is designed to
13 improve the pharma and delivery of CMI in
14 pharmacies in Australia.

15 I mentioned an international
16 comparison that we did in collaboration with
17 colleagues at Wisconsin and Sydney and this
18 was published in the Journal of the American
19 Pharmacist Association in 2007. It showed
20 that the Australia leaflets achieved a very
21 good compliance with criteria for good
22 quality. Now, of course, this is all very

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1 well, but as I've just mentioned the patients
2 aren't actually getting these leaflets, but
3 they are of good quality in terms of their
4 compliance with good quality criteria.

5 The U.K. leaflets did slightly
6 better, slightly worse, sorry, and of course,
7 the U.S. leaflets were languishing a little
8 way behind. And the sample that we looked at,
9 there was only 50 percent compliance for
10 things like contraindications and precautions,
11 things like drug interactions. And a
12 particular problem was legibility and
13 comprehensibility and I'm sure this has been
14 mentioned already in the hearing yesterday and
15 today.

16 So I want to move on now to a
17 systematic review of the research that we
18 undertook in our group funded by the U.K.
19 Department of Health. So if you go on to the
20 first slide, you'll see that it was -- looking
21 at both qualitative and quantitative research,
22 and you can access the whole document on the

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1 HTA website if you click on the link that's on
2 the slide here.

3 So there were four aspects to the
4 trial, if you look at the next slide. We did
5 a systematic review of randomized control
6 trials. We did a systematic review of the
7 qualitative research. We did an information
8 design review looking at good practice and
9 information design, as it applies to CMI. And
10 crucially we undertook stakeholder workshops.

11 The funders particularly asked us to do this
12 to ensure that the review had particularly a
13 patient focus. And so these photographs are
14 taken from the two workshops that we held
15 towards the beginning of the study and at the
16 end. And sitting around these round tables
17 with these stakeholders made quite a
18 difference to how we approached the writing of
19 this review.

20 So what did we find? Most people
21 don't value the written medicines information
22 they receive. The research that we found

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1 covered North America, Europe and Australia,
2 primarily, but overall, across the continents,
3 people weren't valuing the information.

4 The next point shows, and I think
5 this is a crucial point, people don't want
6 written information to substitute for spoken
7 information from the prescriber. I think as
8 we go forward, we must always bear this in
9 mind. We can't just talk about written
10 information in isolation. It's the spoken
11 information people want primarily, and the
12 written information needs to fit into a
13 process where it can support that spoken
14 information.

15 The next point shows that there was
16 great concern about complex language and
17 visual presentation of the information.
18 There's no surprise there. And also the next
19 point showing that people valued the idea of
20 information that was tailored, that was set in
21 the context of their particular illness. And
22 particularly, contained a balance of benefit

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1 and harm information. And we've just heard
2 about the importance of benefit information.
3 Largely, the leaflets across the English-
4 speaking world are mostly negative and harm
5 information and people wanted a more balanced
6 picture.

7 Finally, people -- the research
8 showed people wanted what we described as
9 sufficient detail to meet their needs. Most
10 people did want to know about any side
11 effects, but there tended to be a difference.

12 People sometimes wanted concise information
13 and sometimes wanted longer leaflets. And it
14 depended on their needs at the time. So when
15 we go forward, we need to take account of how
16 we can account for both of those
17 eventualities.

18 If we go onto the next slide, I
19 think there's something that we maybe won't be
20 able to explore today in detail, but I think
21 it's an important point, that the research
22 shows that people actually want written

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1 information to help them make decisions in two
2 ways. They want it to help them make the
3 initial decisions about whether a medicine is
4 right for them and they talk in the research
5 about wanting information about a range of
6 treatments. They also want information about
7 the risk and benefits of individual medicines
8 and again that refers back to the previous
9 presentation. So that's one thing they want
10 it for.

11 The second thing is is about on-
12 going decisions about the management of
13 medicines and interpreting symptoms. And if
14 they decide the medicine is right for them,
15 that's what they want the information for
16 then. And I think a point we need to think
17 about is whether one document can provide a
18 solution to both those needs.

19 I'll briefly mention the
20 information design review that we did. We
21 asked key experts in the field to nominate key
22 text and we did a content analysis to produce

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1 a number of principles. These are the top ten
2 principles. There were many more and this
3 paper is in the "Annals of Pharmacotherapy."

4 The report included a number of
5 implications and on the next slide we'll see
6 that -- we suggested that regulations and
7 producers of information should involve
8 patients at all stages of the information
9 development process, making sure that patients
10 need to be better reflected. And the
11 manufacturers, people who write the
12 information need to use the findings on
13 information design and content to improve the
14 quality and usefulness of the products. Much
15 of this is common sense, but it often isn't
16 reflected in the leaflets that we see.

17 Secondly, because spoken
18 information is the priority for patients that
19 they want from pharmacies and other health
20 professionals, then those professionals need
21 to make sure written information is not used
22 as a substitute for discussion and that

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1 patients are encouraged to use the information
2 and welcome the questions that this may raise.

3 I want to move on now to talk about
4 user testing. And if we look at the next
5 slide, we can see that we have two options
6 really with testing, written information for
7 effectiveness. We can look at content-based
8 testing, as you well know, things like
9 readability formulae, and check lists. Or we
10 can go through performance-based testing. So
11 these are tests that are based on how the
12 leaflet performs, not what it contains.

13 And that's really the only way we can
14 determine whether people can find and
15 understand the information they need.

16 Just one brief point about
17 readability formulae. You will be familiar
18 with formulae like the Flesch formula, the FOG
19 or the SMOG index. And they're based on word
20 and sentence length. So if you write a piece
21 of information backwards, it's got the same
22 words, and the same length sentences, so it

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1 will have the same readability score whether
2 it's written backwards or forwards. So that's
3 a good demonstration I think of how
4 readability formulae can only be a guise.

5 The next slide shows the user-
6 testing process in brief. You select up to 15
7 key points from the leaflet. Those that are
8 relevant to the safe and effective use. And
9 then you design and pilot a questionnaire
10 which tests whether people can find each piece
11 of information and whether they can understand
12 it. Can they express it in their own words?

13 You recruit 20 people from a target
14 patient group and interview them individually,
15 sitting them down with the leaflet and asking
16 them -- asking the questions in the
17 questionnaire. And using the leaflet, they
18 try and find and describe the information.
19 And the target set by the legislation is that
20 for each point 90 percent should be able to
21 find each piece of information and 90 percent
22 of those should be able to express it in their

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1 own words.

2 And then the interview concludes with some
3 qualitative questions, asking the participants
4 what they liked and didn't like about the
5 leaflet.

6 And what I should say is that
7 participants in user tests aren't actual users
8 of the medicine. They are potential users, so
9 people who might any day be prescribed that
10 medicine and find themselves at home with that
11 leaflet. Clearly, people already on the
12 medicine, it wouldn't be a fair test, because
13 they would have prior knowledge.

14 So the next slide shows you an
15 example of the type of leaflet that we used to
16 have in the U.K. and in Europe, something
17 that's very uninspiring, the sort of leaflet
18 that the people in the systematic review just
19 didn't like.

20 And if we look at the next slide
21 we'll see an example of one of the new style
22 leaflets. You'll see that the headings are

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1 very clear. One of the things in user testing
2 that becomes very clear is that a leaflet is
3 as likely to fail because people can't find
4 the information as it is for them not to
5 understand it when they do find it. So
6 navigating around information is absolutely
7 crucial.

8 The MHRA which is the U.K.
9 regulatory body has on their website and you
10 may laugh at this, a pill of the month, a
11 patient information leaflet of the month. And
12 this is one of the examples of the pill of the
13 month. So if you put in a search engine,
14 MHRA, and pill of the month, you'll be able to
15 see around 20 of the new style leaflets that
16 are being used currently in the U.K.

17 If you click on just one more,
18 you'll see that the first part of the leaflet
19 is actually headed "Important Things That You
20 Should Know." Now not every leaflet has this
21 option, but it's something that I'm keen to
22 promote and I want to talk to you about and

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1 we'll explore a little bit later. So the
2 leaflet contains all the information. There's
3 this "Important Things That You Should Know"
4 section at the beginning. And maybe this is
5 similar to the top tips, the top ten tips
6 that's mentioned in the FDA documentation for
7 this hearing.

8 If we move on, the most important
9 thing to say about user testing is that it's
10 an iterative process. You test a document.
11 You identify problems people have when they're
12 actually in the interview. And then you
13 remedy those problems, applying the research
14 evidence, good practice in writing and design.

15 So a reformatted, rewritten leaflet is tested
16 again and it goes around in this circle until
17 it reaches the appropriate standard.

18 The next slide I want to pose the
19 question about whether user testing is
20 actually working perfectly in the European
21 Union. Well, it can produce excellent
22 leaflets when it's vigorously applied and if

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1 it's used in the context of good information,
2 design, and research. However, there is some
3 concern from regulators that's tended to be a
4 focus on passing the test, getting to that
5 magic 90 of 90 and not much focus on using
6 good information design and research. And
7 there's quite a lot of discussion going on in
8 the European Union at the moment about how
9 that can be addressed.

10 One of the other issues is that we
11 have over 20 official languages in the
12 European Union. Only one language version of
13 the leaflet needs to be tested and then it is
14 what's called faithfully translated into the
15 other languages. And of course, we know that
16 faithful translation, any sort of translation
17 is fraught with danger.

18 And I just want to digress slightly
19 just to show you the next slide which is from
20 the BBC news website, so it's obviously
21 reputable. And it talks about a road sign in
22 Wales, apart of the United Kingdom where all

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1 road signs are written in English and in
2 Welsh. You can see that the top of the sign
3 says "No Entry for Heavy Goods Vehicles,
4 Residential Site Only." However, the Welsh
5 underneath actually says "I am not in the
6 office at the moment, send any work to be
7 translated." So the person in the office who
8 was writing this sign that emailed their Welsh
9 colleague to ask for a Welsh translation of
10 this wording and had gotten an automatic reply
11 back saying "I am not in the office at the
12 moment." So this sign actually says
13 underneath, "I am not in the office at the
14 moment." So just a small digression just to
15 illustrate the issues around translation and
16 forgive me for that.

17 So let's go back to the job in
18 hand. User testing can actually be applied to
19 any information format, to a large print
20 leaflet, an audio version, a web-based
21 medicines information. It can also be applied
22 to other forms of patient information like a

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1 clinical trial patient information sheet, the
2 information for use, the IFU, with a medical
3 device, and maybe certainly to print direct-
4 to-consumer adverts. Can people find and
5 understand the important information they need
6 in that particular advert.

7 I just want to show you on the next
8 slide we have a clinical trial patient
9 information sheet. If we click just one
10 further one, this is the front page of the
11 information sheet for the TeGenero trial that
12 took place in Northwick Park Hospital in
13 London a few years ago with considerable
14 adverse consequences for the young
15 participants. We user-tested that leaflet,
16 found that people in the target-patient group,
17 young men between 18 and 40 had great
18 difficulty in identifying and understanding
19 important points of information. For
20 instance, whether they might get the actual
21 drug or a placebo. And so if we click once
22 more we rewrote the leaflet according to good

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1 practice and found a much better understanding
2 and a much better ability to find the
3 information that people needed.

4 So I'm now going to move on to the
5 final part of my presentation about what the
6 learnings might be from what I've described to
7 you. So I think if we go on to the next
8 slide, there are three issues where that I
9 want to focus on. Delivery. In the European
10 Union, our package inserts guarantee supply,
11 but obviously a package insert is a relatively
12 unattractive format. Computer-generated
13 leaflets like those in Australia depend on
14 printer capability, but also the motivation of
15 the pharmacy and the pharmacy system.

16 The main thing I'll say about
17 delivery is the important need to link
18 delivery to spoken information. You remember
19 the systematic review showed that spoken
20 information remains the priority backed up by
21 written information.

22 In terms of how to evaluate

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1 effectiveness, well, there is underway a
2 transformation in the quality of the leaflets
3 we're seeing in Europe and the testing, the
4 user testing really has been the catalyst for
5 that. It's not just user testing that's made
6 the difference, but it's also being the new
7 approach that people have been taking to the
8 leaflets, realizing how important they are and
9 seeing what a difference can be made.

10 In terms of the best format for
11 CMI, then I think the template that we use in
12 Europe does mean that people can expect a
13 common leaflet format. They know, for
14 instance, or they will get to know as these
15 leaflets become commonplace that what they're
16 going to find in section two, that if they
17 look in section four, that's where the side
18 effects. But this is a worry that if you have
19 a template, particularly a detailed template,
20 then you're going to stifle innovation.
21 You're going to stop the process of getting
22 better and better leaflets.

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1 Another point, of course, is that
2 drugs are very different. You might compare
3 aspirin with an oral contraceptive and you
4 might need different templates for different
5 types of drugs. In terms of what the most
6 effective order is, the EU template does seem
7 to work quite well in most cases.

8 If we move on to the next slide, we
9 heard patients want more benefit information
10 and so we need to try and strike this balance
11 and the U.K. agency, the MHRA, in their
12 publication always read the leaflets.
13 Included an example of the sort of benefit
14 information that benefactors might like to
15 include in their patient information leaflets.

16 This was for an angiotensin II
17 antagonist and it talks about the consequences
18 of high blood pressure if it's not treated and
19 the importance of keeping, taking the medicine
20 because of those issues.

21 Let's go on now to look at full or
22 concise information and this is really just

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1 about the end of my presentation. The study
2 by Kimberlin and colleagues that you heard
3 about yesterday, talked about clinically
4 irrelevant information and information
5 overload and the need for more uniform, what
6 they said was user friendly, concise and
7 clinically relevant CMI.

8 Now if we go back to thinking about
9 the systematic review, on the whole, people
10 said they wanted all of the side effect
11 information. And that people wanted concise
12 or longer leaflets, at different times,
13 depending on their particular needs. And one
14 of the issues I think we need to think about
15 here is who decides what patients aren't told
16 and what they are told. And the international
17 study that we did recently that I mentioned,
18 there were many CMI that didn't include
19 information such as pregnancy and breast
20 feeding, driving and using machines. And
21 clearly, these are things that patients would
22 want to be included.

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1 I think one of the answers for full
2 or concise information is that you can have
3 full information, but make it easy to
4 navigate. Make it look easy to read. And
5 through good information design, actually
6 meets most patients needs.

7 And most importantly, if we go on
8 to the next slide, maybe the use of the
9 headline section that I've mentioned might be
10 a way forward here. So you have the main
11 leaflet, but at the beginning you have this
12 overview. Five to ten points may be, and then
13 at the bottom of the overview it says now read
14 the rest of this leaflet. So that might be a
15 way of meeting the needs of people who want
16 concise information and people who want more
17 detailed information.

18 So if we move on to my summary
19 slides, I would suggest that any mandated
20 process for CMI provision has to be firmly
21 linked to the provision of spoken information
22 from a professional. You can't be divorced

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1 from that.

2 Templates can get people to be more
3 familiar with where to find information, but
4 maybe will stifle innovation. Performance-
5 based testing is the only way to ensure people
6 can find and understand the information they
7 need. People want differing amount of detail
8 at different times. And I've just mentioned
9 about the concise information would depend on
10 professionals deciding what patients wanted at
11 any particular time and the fact that a
12 headline section might meet patients' needs in
13 this respect.

14 And finally, the inclusion of more
15 benefits information, having a more balanced
16 leaflet would help meet patients' concerns.
17 And that's it. Thank you very much.

18 DR. FISCHHOFF: Thank you. You've
19 just gone blank here. Obviously, you're
20 seeing us. We have about ten minutes now for
21 members of the panel if you're able to stay
22 with us.

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1 DR. RAYNOR: Of course.

2 DR. FISCHHOFF: Oh great, thank
3 you. Let's start with Mike and then Musa.

4 DR. GOLDSTEIN: Hello there. This
5 is Michael Goldstein. I really appreciate
6 your presentation, your summary, your results,
7 and your recommendations and it's a really
8 good example of how to both develop and test
9 materials in an effective way. And I'm
10 interested in your comments particularly about
11 the importance of the user testing occurring
12 in a cyclical fashion improving the process
13 through the input of patients. Yet, I didn't
14 hear you talk about testing after the actual
15 creation of the leaflet in real time with
16 patients in different stages of their illness
17 or different points in their care. And I
18 wonder if there has been further testing after
19 the development of the materials and in real
20 time use.

21 DR. RAYNOR: Okay, thank you.
22 That's a very good question indeed. The

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1 legislation simply relates to the testing in
2 the hypothetical situation. Individual
3 manufacturers wouldn't be able to do the more
4 long-term testing, I think, because of the
5 practical implications. But we are, indeed,
6 I've been talking to colleagues in Sydney
7 today about doing some of this testing to see
8 how the user testing translates to real life.

9 But no, the legislation only relates to the
10 testing in the hypothetical situation.
11 Clearly, testing it in the real situation
12 would be very valuable, but funding needs to
13 be identified to do that.

14 MS. MAYER: Thank you, Professor
15 Raynor, that was an excellent presentation.
16 In light of the presentation that we heard
17 immediately before yours, I don't know if you
18 were able to hear that from Drs. Schwartz and
19 Woloshin about the drug facts box, I wondered
20 if you would care to comment about using
21 actual data, quantified data for benefits and
22 risks in the format that you're working with?

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1 DR. RAYNOR: Okay, at the moment
2 any benefits information in the leaflets is
3 general and doesn't give any numerical data.
4 The side effects section does give numerical
5 data, but in five bandings. So generally, we
6 have headings relating to a verbal descriptor
7 and an actual frequency. So the first heading
8 would say very common, affects more than one
9 in ten people. And the next one down would be
10 common, affects, less than one in ten people,
11 and going down to very rare, affects less than
12 one in ten thousand people.

13 Now our research has shown that at
14 the moment that's the best we can do in terms
15 of getting understanding. There are still a
16 number of people who don't understand that
17 terminology and whose estimates are
18 significantly higher than the actual
19 frequency, but it's certainly better than just
20 using the verbal term on its own. And we've
21 already heard the percentages, particularly
22 percentages less than one percent, very poorly

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1 understood by many people in the population.

2 But going back to your question
3 about benefits, it's important that we try and
4 develop some numerical frequency data that
5 people will understand and ideally have that
6 so it relates to the way the risk information
7 is described, so that does help people to make
8 a judgment between the two.

9 MS. MAYER: Thank you.

10 DR. FISCHHOFF: Betsy and then Sid.

11 DR. SLEATH: Hi, Theo, this is
12 Betsy. I just wanted to say hi.

13 DR. RAYNOR: Hi, Betsy.

14 DR. SLEATH: That was wonderful.
15 It's good to see you. I really enjoyed your
16 presentation, and you stressed the point that
17 leaflets should be used kind of in addition to
18 health care professional counseling. And I
19 just wondered if you could comment for us on
20 kind of the current state of affairs in the
21 U.K. as to do pharmacists regularly counsel,
22 do physicians, you know, have studies been

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1 done looking at whether they provide
2 appropriate risk communication? Because in
3 the states we struggle with that it varies by
4 state as to how well patients are counseled in
5 addition to the leaflets.

6 DR. RAYNOR: Yes. There's no hard
7 data in the U.K. There's hard data about
8 pharmacies interacting with people buying
9 over-the-counter medicines, and on the whole
10 that has shown that there's a considerable
11 amount of work to be done to improve that
12 spoken interaction that pharmacies have. But
13 we don't have any hard data on prescription
14 medicines.

15 Anecdotally, from my own experience
16 and anybody you would speak to, I think most
17 people don't get any high-quality spoken
18 information from their pharmacist. Now there
19 are notable exceptions, excellent
20 practitioners who -- where that doesn't fit
21 in, but in those pharmacies that are tending
22 to predominate now where the focus is on the

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1 throughput of prescriptions, then it's the
2 exception, I think, that people are even
3 offered spoken information, and that's
4 something that we need to remedy.

5 DR. FISCHHOFF: Okay, thank you.
6 Sid, then John, and then we'll have to go on
7 to our next speaker.

8 DR. WOLFE: Very good presentation.
9 The published papers were very helpful in
10 preparing me for your presentation. You
11 summarized it very well.

12 I want to focus just on your
13 comment that it was in 2005 that there was
14 further legislation that mandate user testing
15 and that after that no tests, no license, and
16 then you went on to point out that through an
17 iterative process, at least 90 percent of the
18 people had to be able to find the information
19 and 90 percent had to be able to express it.

20 The two questions are I assume that
21 the group or company that you have is at least
22 one of the people doing this testing of the

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1 leaflets, is that correct?

2 DR. RAYNOR: That is correct.

3 DR. WOLFE: And the second question
4 is could you just amplify a little bit about
5 the difference, if there is any, between
6 expressing what is in the pamphlet and
7 understanding it. How much is there of not
8 just sort of reiterating what they had found
9 but actually being pushed to demonstrate that
10 they understand the content?

11 DR. RAYNOR: Okay. Most of the
12 questions -- well, a minority of the questions
13 do require a simple answer which you can't
14 really express any other way. So one of the -
15 - the user test would always ask what the dose
16 might be in a particular situation or for a
17 particular person. And so if it's one tablet
18 in the morning, then there's not really any
19 other way you can say that. But on the whole,
20 the questions are more exploratory.

21 So if there was a statement in the
22 leaflet about drinking alcohol, for instance,

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1 then we might pose a question, supposing it
2 was your birthday and you wanted to have a
3 small glass of wine, would it be okay to do
4 that while taking this medicine? So we try
5 very hard to present scenarios in the
6 questions which are going to be more
7 discriminatory in actually determining whether
8 the person can understand and isn't just
9 repeating back. So there are some points
10 where it can only be the repeating back, but
11 on the whole we pose a situation and get them
12 to say what they would do in that
13 circumstance.

14 DR. WOLFE: Just a brief follow up.

15 One of the serious deficiencies of a number
16 in the recent study published on U.S.
17 pamphlets was that in the category of what
18 should you do if such and such adverse
19 reaction occurs, what is the patient behavior,
20 was there anything comparable to that?
21 Because certainly for a number of drugs, the
22 appearance of severe abdominal pain for an

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1 NSAID or so forth should prompt them to stop
2 taking the drug. Was there any kind of what
3 action should you take, what if something
4 comes up as part of your understanding
5 testing?

6 DR. RAYNOR: Yes, and the template
7 doesn't include wording related to this. But
8 certainly with the more high-risk drugs, then
9 there is always a first category in the side
10 effect section which says something along the
11 lines of if any of the following happen to
12 you, stop taking this medicine and see a
13 doctor straight away. And then they will be
14 listed and then the rest of the side effects
15 would follow on.

16 DR. WOLFE: Thank you very much.

17 DR. FISCHHOFF: John.

18 DR. PALING: Dr. Raynor, good
19 morning. This is John Paling. Despite any
20 evidence you may get to the contrary, I
21 actually am an American and have been over
22 here 28 years. My experience, both working in

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