Tools to Guide Efforts to Reduce Deaths from Colorectal Cancer
Webinar Transcript
Moderator: James Hadley
February 28, 2008
3:30 pm EST

Coordinator: Welcome and thank you for standing by. At this time all participants are in a listen only mode. During the question and answer session please press star 1 on your touch tone phone.

Today's conference is being recorded. If you have any objections you may disconnect at this time. Now we'll turn the meeting over to Mr. James Hadley. Sir, you may begin.

James Hadley: Thank you so much, Operator. Good afternoon ladies and gentlemen. My name is James Hadley and I am the advocacy program manager in the Office of Advocacy Relations here at the National Cancer Institute.

Welcome to today's Webinar on tools to guide efforts to reduce colorectal cancer deaths developed by the National Cancer Institute Cancer Intervention and Surveillance Modeling Network, simply known as CISNET, C-I-S-N-E-T.

CISNET is a consortium of investigators who focus on modeling to improve our understanding of the impact of cancer control interventions on population trends in incidence and mortality.

NCI's CISNET models are used to project future trends to help determine an optimal cancer control strategy and ultimately reduce and prevent colorectal cancer deaths.

This Webinar provides an opportunity for those in the field of cancer control, advocacy, public policy, legislative affairs and clinical science to learn about

how these decisions, support tools and models can serve as a guide to evidence based policies and cancer control planning.

For today's Webinar we have with us Dr. Eric J. Feuer, better known as "Rocky". He is the CISNET program director and Chief of the Statistical Research and Application branch of NCI's Division of Cancer Control and Population Sciences. He will give an overview of CISNET.

Dr. Ann Zauber, Associate Biostatistician, Department of Epidemiology and Biostatistics and head of the Colorectal Cancer CISNET Coordinating Center at Memorial Sloan Kettering Cancer Center in New York City. She will provide an overview of the colorectal CISNET group and applications.

Mr. Scott Gilkeson, President and Chief Web Designer of scottgilkeson.com will give us a tour of the CISNET Web site, and Dr. Bill Lawrence, the Medical Officer for the Center for Outcomes and Evidence at the Agency for Health Care and Research Quality. He'll talk about his experience in collaborating with CISNET.

We also have with us as resources during the question and answer series, Dr. Karen Kuntz from the University of Minnesota and Dr. Carolyn Rutter of the Group Health Cooperative.

A question and answer session for participants will follow the panelists remarks so be sure to grab a pencil right now please and write your questions down as our presenters go through their presentations.

The operator will assist us with the Q&A session. Before asking a question, please give us your name and affiliation. Please be advised that we are not able to address any personal medical issues over the phone. We suggest that

you consult your personal physician or call the NCI Cancer Information Service at 1-800-4-Cancer for resource material.

If you have friends or colleagues who cannot join us live today, they can view and listen to today's Webinar in its entirety by going to the CISNET Web site, that's cisnet.cancer.gov. C-I-S-N-E-T.cancer.gov. Before we get started, a few reminders. I would like to take this opportunity to inform you about the monthly understanding NCI toll free teleconference series sponsored by NCI's Office of Advocacy Relations. The series provides an opportunity for the cancer advocacy community to learn more about NCI's important cancer research programs and how advocates are involved.

We will launch our spring series on Thursday, March 20th with the topic, Global Burden of Cancer Partnerships and Progress. Joining us will be Dr. Joe Harford who is the Director of NCI's Office of International Affairs.

Other topics in the spring series include Cancer Health Disparities, Community Oncology and Prevention Trials Research Group and the Clinical Trials Advisory Committee. For additional information about understanding NCI teleconference series, please visit the Office of Advocacy Relations Web site at advocacy.cancer.gov. Again, that's advocacy.cancer.gov.

Now I'd like to turn the program over to Dr. Rocky Feuer, better known as Rocky.

Eric Feuer: Thank you very much. I see my slides are showing.

Yes, okay. Can you see them?

Eric Feuer: Okay. So I'm – thank you very much James. I'm Rocky Feuer, the CISNET Program Director and Chief of the Statistical Research and Applications

Branch. I'm going to give a very, very brief overview of what CISNET is all about.

And as James said, CISNET is the NCI sponsored consortium of modelers focusing on modeling the impact of cancer control interventions; that's screening, treatment, and primary prevention on current and future trends in incidents and mortality, sort of the what-if questions and the analysis of cancer trends and then optimal cancer control planning.

We – in CISNET we have four different cancer sites – breast, prostate, colorectal and lung cancer and you can see there at the bottom of the page our Web site, cisnet.cancer.gov.

One other goal of CISNET is to develop what we call flexible models which can handle the full range of input. This means that they can handle risk factors, changes in screening behavior and diffusion of new treatments, the three types of cancer control interventions, and they go in to the different cancer models and outcomes, incidence and mortality and other sorts of output.

Another goal of CISNET is to make results of modeling efforts more transparent. And in general modeling has been marred by lack of comparability of inputs, outputs and basic definitions and difficulty of understanding and comparing different model assumptions and structure.

So here I have an example – this is not from CISNET – of the results of four independent published studies on the cost effectiveness of spiral CT screening. And these came out within a few years of each other and you can see that the results vary dramatically from $2500 per quality adjusted life year saved all the way up to $154,000 per quality adjusted life year saved.

And if you try to put these results together and make any sense out of it, it's very, very difficult because there's differences in the target populations, screening frequency, stage shift assumptions about lead time and over diagnosis and sensitivity and by the time you have all those differences it's very hard to make any sense out of how to put – how to compare these four published results.

So CISNET has had several efforts to make modeling more transparent. First of all we take what's called a comparative modeling approach. Sometimes we call it base cases. And these are central questions to be addressed by all groups with a common set of inputs and outputs.

Secondly we have something called a model profiler which is a common set of Web based templates to enter model assumptions and structure. And sometimes within CISNET we have talks comparing a certain aspect of model structure so we better understand it, for example, how do models implement post diagnosis survival.

And CISNET was applauded recently by the ISPOR taskforce, that's the International Society for Pharmaco Economics and Outcomes Research, on good modeling practices for setting up a forum to compare model results and articulate reasons for discrepancies.

Now as an example of a base case work, there's work by the CISNET breast cancer group to determine the contribution of mammography and adjuvant therapy, an unprecedented 24% decline in breast cancer mortality from 1990 to 2000.

And this work which was published in the New England Journal of Medicine was by seven groups and indirectly overturned growing concerns that many of the randomized trials of mammography which showed a benefit were flawed

and the consensus among the consortium was that it'd be difficult to explain its large decline in U.S. mortality without a substantial contribution from mammography.

And you can see over to the right there was an editorial in the New York Times that said what seems most important is that each team – and there were seven teams – found at least some benefit from mammograms. The likelihood that they're beneficial seems a lot more solid today then it did four years ago although the size of the benefit remains in dispute. And this result I – this study I think really indicates the power of comparative modeling.

Now I just want to say a word about working with CISNET investigators. CISNET investigators invite collaborations on applying their models. And as a true collaboration, you would work together with a CISNET investigator or investigators to decide inputs, model runs and interpret results.

You're welcome to contact investigators directly. Their Web – their email addresses are on the CISNET Web site or I can help provide guidance about which model might be best – most appropriate for your needs.

There is some financial support usually needed for these collaborations. But NCI has built the infrastructure so – and that was the large cost of – the cost of a particular application of the model are usually somewhat moderate.

I next would like to turn it over to Ann Zauber who will be talking about the – specifically about the CISNET colorectal cancer initiative.

James Hadley: And Ann, before you start, I'd like to let the audience know if they want to have the presentation over the entire screen, press F5. Thank you. Ann.

Ann Zauber: Thank you very much. I'm Ann Zauber and I'm going to be telling you about our colon cancer CISNET modeling group. And I thank you very much for joining our Webinar. I'm not in the room. Are my slides showing to all of you? Can you see?

James Hadley: Yes.

Rocky Feuer: Yes.

Ann Zauber: Okay. All right. First I'm going to tell you about our colon cancer CISNET program, then what do we mean by micro simulation modeling for colorectal cancer and then I want to give you some examples of the micro simulation modeling which we have been doing to inform health policy.

We've been working with the Centers of Medicare and Medicaid Services and AHRQ, United States Preventive Services Task Force, AHRQ, the Centers for Disease Control, Cancer Care Ontario in Canada and the Canadian Institute of Health Research, and the American College of Radiology Imaging Network.

There are three modeling groups in this CRC CISNET program. The (MISCAN) model is used by Memorial Sloan Kettering and Erasmus Medical Center in Rotterdam. And this model was originally created and developed by the Erasmus Group. I am the principal investigator for our consortium.

The SimCRC model was developed by Karen Kuntz who's at the University of Minnesota and Karen is on the call with us and also her colleague, (Amy Knudsen of Massachusetts General Hospital). The CRC-Spin model was developed by Carolyn Rutter at Group Health Cooperative and Carolyn is also on our call.

We also have three affiliate members – Dave Vanness from the University of Wisconsin, and Scott Ramsey and Georg Lubbock from the Fred Hutchison. We also have a coordinating center and I'm in charge of the coordinating center.

First, what do mean by micro simulation modeling for colorectal cancer? The adenoma is the precursor lesion for colorectal cancer. The adenoma forms in the normal epithelium which is in your far left picture. Some adenomas may grow quite large as you can see in the middle picture and then some of these can advance onto the invasive colorectal cancer which is your far right picture.

Now on our micro simulation models we represent the adenoma carcinoma sequence as a series of stages from no adenoma to the adenoma by size to pre clinical disease, then clinical disease and death due to colon cancer.

And individual is at risk to develop an adenoma by age and sex and he can develop one or more adenomas. If an adenoma forms, then some will grow larger and some can become more advanced. Some of these will progress to the either pre clinical or clinical cancer and some of these can cause death from colorectal cancer.

I'm not getting my clicker to work so I've got that but they should be coming up. Here we go. We also can intervene in the natural history of the adenoma carcinoma sequence by introducing an intervention such as screening. And with screening, depending on the kind of screening, it can pick up the adenoma at a fairly early stage here and take it out and therefore divert and keep that adenoma from becoming a colorectal cancer.

So we have the natural history model for colorectal cancer and then we also can do an intervention such as screening or change in risk factors that could affect whether that adenoma would go on to cause colorectal cancer.

This slide here, population simulation model, is very similar to the one that Rocky Feuer just showed you. And the gold box essentially is our colon cancer natural history model. And then we can look at the risk factor trends, screening behavior, and the diffusion of new treatments as how they affect that colorectal cancer natural history model and affecting who would get colon cancer incidence and mortality after we have introduced interventions to reduce colorectal cancer incidence and mortality.

So the population simulation model builds up an entire population from the U.S. with the screening behaviors and the risk factor trends with some getting adenomas and some not getting adenomas and applies interventions that we just discussed.

So let me give you some examples – further examples – of how we've used the micro simulation modeling to inform health policy. So in 2003, the Center for Medicare and Medicaid addressed the question of whether to cover a new colon cancer screening test. And if so, what should be the cost of this new test?

The fecal occult blood test on your left called Hemoccult has been used for colon cancer for over 20 years and is reimbursed at $4.54. There are new fecal immunochemical tests which are more specific to human hemoglobin in the stool and do not require dietary restrictions and had a higher sensitivity for detecting colon cancer than does the Hemoccult II FOBT. CMS asked the CISNET modelers to assess how much more could be charged for the new immunochemical test based on its projected increase in lives you save through screening. So how much would this new test be charged for?

So the CISNET models reviewed have then in turn provided a cost effective analysis of this question. CMS did approve this test and the test reimbursement is $22.22. Just this past year in 2007, CMS again asked the

question of what would be the reimbursement for a new colon cancer screening test and this time the new test was a stool DNA test which has currently been ranging from $350 and $850 being paid for in practice.

A national coverage determination was requested on the stool DNA, called PreGen-Plus test Version 1.1, where it could be applied every five years in an average risk population. So again we did a cost effective analysis and did a literature review and our model suggested that $34 to $51 could be a suggested price based on the cost effective modeling. CMS has not yet determined a coverage decision or reimbursement on this new test but our report that we sent to CMS is at the Web site below.

In 2002, the United States Prevention Service Task Force recommended that all average risk persons age 50 or over should have colorectal screening but the Task Force said that there was insufficient evidence to recommend one test over another. And here we show again the stool based blood test, the guaiac version and the immunochemical version and also endoscopy.

We were asked to perform the task force a decision analysis for colorectal cancer with looking at, first of all, the test, the Hemoccult II, the Hemoccult (Sensa) and FIT with FOBT tests, flexible sigmoidoscopy, and colonoscopy and were asked to address what should the age be to begin – 40, 50 or 60, what would be an age to end screening – 75 or 85, and what should be the repeat intervals. For FOBT should it be one, two and three years between testing? For endoscopy, five, ten or twenty?

We assessed life years saved for outcome and we compared it against colonoscopy utilization. Colonoscopy was used as an indicator of resources required and also the risk of screening since there is a slight risk of perforation with colonoscopy. And the task force decision has not yet been announced for this assessment.

Other examples from colon cancer screening programs: we're working with the Centers for Disease Control with Dr. Laura Seeff; we're looking at the programmatic and medical resources requirements for FOBT, flex sig, CTC and colonoscopy screening in low income and uninsured populations in the United States. This is modeled using phasing in of screening over a 15 year period with consideration of prior screening history.

We're working with Cancer Care Ontario to see the life years saved and the endoscopy resources required for FOBT screening in the average risk population, Colonoscopy will be offered for those with familial risk . And we've just started working with the Canadian Institute of Health Research on a new team in population base colon cancer screening looking at new screening programs in Ontario and Alberta with (Linda Rabeneck) as the principal investigator for this.

And we also are now looking at cost effectiveness of CT colonography for the ACRIN study. This is a CTC study called ACRIN 6664. It's CT colonography versus optical colonoscopy using three dimensional and two dimensional views for CTC. The trial results were presented in the fall of 2007. We're currently doing a cost effective analysis being lead by Dr. Dave Vanness), one of our affiliate members.

Finally we have been looking at the cancer mortality projection. Microsimulation modeling of the US population for 2005 to 2020 was created to determine what cancer control interventions could reduce colon cancer mortality.

The interventions we considered were risk factor changes, screening, and treatment. There's now a public website available to assess the colon cancer mortality projections. And that will be presented next by Scott Gilkeson.

I wanted to thank you very much for your attention. And we look forward to collaborating with you. Scott.

Scott Gilkeson: Thank you Ann. Let me bring up the website here. So I'm Scott Gilkeson, I'm the Information Architect for the Colorectal Cancer Mortality Projection's website, what you see here. And I'll give you a brief tour.

This site is intended for policy makers and people interested in policy, for cancer control planners, and program staff, and for researchers. We've set it up with two entry points.

There are key findings for those who want to quickly see what questions these data answer. And there's an interactive tool for viewing model results for those want to go deeper into the data. We will look at the key findings first.

We list four key findings posed of questions. The first is how to accelerate the reduction in CRC mortality. If current trends in risk factor screening and chemotherapy continue our models predict that CRC mortality will continue to decline over the 15 year period of the study.

The question here is whether there's a way to accelerate that decline. Our results show that increasing screening as represented by these blue bars, as much as seems realistic, has the most impact over time. These numbers are the percent reduction over the current trend baseline by 2020. Screening would account for a 6.7% additional reduction.

If the goal were to show immediate impact then improving access to chemotherapy is the best approach responsible for almost all of the additional reduction in mortality for the first five years. I should point out that continuing

current trends - the baseline - is no slam dunk, and will take considerable effort to continue the progress that we're currently making.

There are more key findings, but by now you're probably wondering what we mean by improvements in risk factors, screening and, chemotherapy. There are pages for each one of those, and we'll look at risk factors.

This brief summary at the top may provide all that you need to know. But there are more details if you're interested. The risk factors that were modeled are smoking, obesity, physical activity, fruit and vegetable intake, multi vitamin use, red meat intake, aspirin or NSAID use, and for women, post menopausal hormone replacement therapy. All of these have been shown to impact CRC mortality positively or negatively.

Scrolling down further this table gives an idea of the modeled inputs for each risk factor by race and sex group. For instance, if we look at the percent of the population at healthy weight we see that in 2000 it ranged from 35% of white females down to 16% of black females.

Our projection of current trends indicates that the picture will be worse for all groups in 2010 -- that's what the orange color represents. And our optimistic, but realistic goal would be an improvement over the current to trends. But still for most groups not better than the 2000 level.

And it seems clear that none of the groups will accomplish the Healthy People 2010 objective of 60% at healthy weight. You can see this in a graphical form and over the entire period of the study by clicking on an individual race/sex link here.

On this graph you see that the red diamonds are NHANS data points that were used to make the projection of the current trend which is the black dotted line here.

The green line shows our hypothetical best case scenario which we call optimistic, but realistic. And the blue line shows what it would take to reach the Healthy People 2010 objective.

Now, let's look at screening. We can see similar information about screening on the screening page. The screening modalities that were modeled include home based FOBT, sigmoidoscopy, and colonoscopy.

There's a similar table on this page then shows the inputs for screening. So here you can see that all groups except black males are expected to exceed the healthy people 2010 objective of 50% for endoscopy, which is what that bluish tint means. And again, you could look at graphs with the historical data and projections.

As for chemotherapy, this page describes what we mean by improving chemotherapy. It does not mean new drugs, but rather than the best currently available drugs are made available to more people in two ways. Everyone receiving treatment gets the best drugs currently available. And everyone who could benefit receives treatments.

The best treatment available is in this table, FOLFOX for Stages II and III. And FOLFOX with antibodies for Stage IV. The charts in this section are area charts. And they show the difference between the projected trends and optimistic, but realistic goals. There are no Healthy People 2010 objectives for chemotherapy.

This chart, for example, shows the graph of Stage III treatment for black men and women 60 to 74 years of age. And it shows how many people get treated in the optimistic scenario. You can see this area above this line is more people being treated. And the fact that the FOLFOX goes all the way to the bottom instead of stopping with 5FU shows the discontinuance of 5FU in favor of the more effective FOLFOX.

There's a table similar to the others that shows graphs for various ages and groups. You can also look into more details on the simulation models and the projection scenarios.

But now let's go look at the actual results on the interactive graphs. On this page you'll find that there are three ways to look at the results. You can compare the intervention scenarios. You can compare between race and gender groups. And you can compare the results from the two models that make up these results. The first two choices show the average results of the two models.

We'll look at intervention scenarios first. And you'll notice that you can choose specific race/sex combinations. If we look at both races and both sexes, everybody all together, we see that the projected current trend will result in a decline in mortality that misses the Healthy People 2010 objective for CRC mortality, which is this purple cross, but not my much.

In fact our models project that a rate of 13.7 deaths per 100,000, the stated healthy people objective, can be reached in 2013 by continuing what we're currently doing. But what can we do better? That's the optimistic, but realistic scenario.

If we look at risk factors you can see that the average model outcome, assuming risk factors improve beyond current projected trends while

screening and chemotherapy continue as currently projected, that isolates risk factors. And it shows not a lot of difference on the mortality graph, but on the impact of intervention you can see that a 3% additional reduction would be expected by 2020.

If we check screening and chemotherapy we can see the impact of each of these interventions alone. And you may recognize this as the impact of intervention graph from the key finding that we looked at.

We can also look at all of these interventions together and that shows that we could expect a total impact of about 12% by 2020.

If we then look at a comparison between optimistic and realistic, and Healthy People 2010 Objectives we see that for everyone, for both races and both sexes, the results are not very different on this impact of intervention graph. It's pretty close to the same.

But if we go back up and change it to look at blacks alone now we do see some difference between Healthy People 2010 and their optimistic, but realistic scenario.

So let's go back and look at another style of interactive graphs. The graph that compares race and gender groups. Again, we start out with a projected trends baseline. And this is showing that there's a pronounced difference in mortality between men and women.

In fact, women are projected to reach the healthy people 2010 CRC mortality objective. Again, represented by this purple cross. If we look at white females and black females then we see that meeting the objectives applies to white females only.

And if we now look at white males and black males we see that although the mortality rate is projected to decline for black males at about the same rate as for white males and other groups it will still be significantly greater than the Healthy People 2010 objective in 2020.

We can look at optimistic model runs. And we can see that achieving the optimistic, but realistic goals in all areas will lead to an additional decline in the mortality rate that's larger in absolute terms for black men than for white, but not significantly different in relative or percentage terms.

We can look at other scenarios. If we look at risk factors achieving the Healthy People 2010 objectives which effectively eliminates any disparities in those risk factors since healthy people 2010 objectives are for the nation as whole, we see that it would have a larger impact for black men than for white men.

By holding the mouse point over the line you can see it's 13.4% reduction for black men versus 7.7% for white men, or an absolute rate of 19.4% for black males versus the projected trends baseline which was 22.4% given projected trends.

So that concludes my part of the presentation. And I'd like to turn it over to Bill Lawrence.

Bill Lawrence: Thank you. And let me just take one second to bring up my presentation here. I'm Bill Lawrence with The Agency for Healthcare Research and Quality. And here we go. And Dr. Feuer asked me to spend just a couple minutes talking with you about our experiences at AHRQ working with the CISNET colorectal investigators on a couple of projects that we asked their help for.

The projects that we had actually worked with the CISNET investigators on were first a cost effectiveness analysis of screening using stool DNA testing. This was done at the request of the Centers for Medicare and Medicaid Services. And done through our Technology Assessment Program which supports CMS in their efforts.

The other one was on outcomes of screening for colorectal cancer. And AHRQ supports the US Preventative Services Task Force and this in conjunction with a systematic review of the evidence was done to support to the task force and its deliberations on updating in Colorectal Cancer Guidelines or screening guidelines, excuse me.

And I thought what I would do in the brief time we had together is just take a couple minutes and discuss two issues that lead us to the CISNET investigators in the first place for our projects. And then two issues that I thought were worth while noting in – from working with the groups.

So first of all as we're approaching these two projects the question came up why are we doing a model at all? And essentially what we're – what we were interested in is looking at questions for which there's really not another way to get an answer.

To take the task force analysis, for an example, this project was done to supplement a systematic review on colorectal cancer screening. And modeling was chosen to answer questions that would never be answered by clinical trials due to issues of feasibility or just such a large sample size that the trials could never be run.

For example, the investigator – we asked the investigators to look at issues such as different strategies for screening, different start ages for screening, different stopping ages for screening and you'll never see randomized trial, for

example, that's going to compare starting screening at age 40 versus starting screening at age 50. The sample size on that would just be too large to be feasible.

In situations like these modeling's quite useful for estimating comparisons that are never going to be tested in a trial. Why CISNET specifically?

Before we approached Dr. Feuer and the CISNET investigators we did a literature search to look for published colorectal cancer models that might accomplish the projects we were interested in.

There are other models in this area. But the CISNET Group first of all has done a lot of work examining the internal model assumptions. They've worked on validation of the models. And have done a lot of work on cross model comparison, so that they have a good idea of how their models are going to vary looking at the natural history of colorectal cancer.

I worry about this sort of black box issue, if you will, for all models. Basically not really knowing what's going on inside. And this often happens since journals rarely allow full technical reports on the models. And I think the work done by the CISNET Group has really done the most available for models to establish both the transparency and the creditability of the models.

So in working with the modelers, just a couple issues. First of all, I wanted to make a note on framing the questions. Remember in working with the CISNET Group, basically you're working with the modelers not the models themselves.

So in doing any project with them, basically you should take advantage of the modeler's expertise in this area. I think a major portion of the effort in any product really should be in the development of the exact questions that the

analysis will be designed to answer. You need to think exactly what questions that will provide, basically that will provide analyses that'll help you make decisions.

As a couple of examples that we faced number one what examples – or excuse me, what outcomes are really important to you? As modeler myself, I think in life years and quality. But a lot of people don't really have a good intuitive grasp for this in having other relevant outcomes such as number of colonoscopies performed, number of cancer cases detected, number of cancer deaths, maybe more meaningful for clinical audiences, what strategies are relevant, do you really need to know about stopping at age 76 rather than 75 as an example?

So boil it down to what exactly do you need? Look at what's feasible. Past that, if you've got time then you can look at what's interesting and leave out what's the stuff that we're never going to do anything with.

The other issue that came up specifically with CISNET is working with multiple modeling groups. And I chalk this up as an advantage, but a scary one. When I originally approached Dr. Feuer, he's the one who suggested with working with more than one modeling group. And in thinking about that, again as a modeler myself, it's what happens as models come to diverging conclusions or we simply get confused by the volume of the results presented.

But I think overall it ultimately proved helpful as the various assumptions in the different models gave us sort of a built in sensitivity analysis according to the various approaches to modeling natural history of colorectal cancer.

I will say it's important to have a coordinator, and that's one thing you should be looking for. A coordinator is responsible for combining the different model ouputs into one coherent report. Dr. Zauber served this role for our projects

and we are quite happy with the results in getting one coherent whole from the results in multiple models.

And with that I thank you and I'll turn it back to James.

James Hadley: Thank you so much. Okay operator we're ready for questions. I want to remind you that the CISNET website is cisnet.cancer.gov. That's cisnet.cancer.gov. Operator?

Coordinator: Thank you. We will now begin the question and answer session. If you would like to ask a question please press star 1 on your touch tone phone. Please un-mute your phone and record your name clearly when prompted. Your name is required to introduce your question. To withdraw your request please press star 2. One moment please for the first question.

James: If you're interested in joining our listserv, I want you to send me an email at liason@od.nci.nih.gov. Again, liason@od.nci.nih.gov. We're giving you an opportunity to ask questions at this point.

Coordinator: Once again, if you would like to ask a question please press star one.

James: If you'd like information about our understanding NCI toll free teleconference series please check out our website at advocacy.cancer.gov. Are there any questions? We're standing by.

Rocky Feuer: And people are welcome to go on the CISNET website. And there's investigator's email addresses and then a general email address for questions that they could send there at a later time. But I think you can have an opportunity now to directly ask a principle investigators any question you might have about how a particular situation you might have that you're thinking of modeling and how it might be applied using the CISNET model.

Coordinator: We do have a couple questions. Our first question comes from (Lorraine Tase).

(Lorraine Tase): Yes, I just have a question about colon cancer regarding breast cancer. It doesn't have to do with the CISNET. But do you find that the women with breast cancer have a higher incidence of colon cancer?

Ann Zauber: There has been some association between breast cancer and colon cancer. This is because both breast cancer and colon cancer are associated with BMI to a certain degree and that could be consistent. I don't have a formal answer for you about it. We could get some answer together, but there is some correlation in terms of some of the common risk factors.

(Lorraine Tase): Okay, thank you.

Rocky Feuer: And there's been extensive studies of – and there's a model graph that the National Cancer Institute just put out. If you send us an email we could link you up with that that says – shows if you got one particular cancer how – to what extent do you have elevated risk of getting almost any other cancer. And there's been almost thousands – hundreds of different cancer pairs have been associated to see which ones have elevated risks.

(Lorraine Tase): Thank you.

Coordinator: Our next question comes from (Arthur Hartz). Sir you may ask your question.

(Arthur Hartz): I was wondering if the primary purpose of the modeling is to guide a policy decision by the government? And if so is that going to help focus the debate on how much money we want to spend in this area?

Ann Zauber: Art that's an excellent question. I'm glad that you joined us for the webinar. We are beginning to put costs in our model. And we certainly can use this and look at the issues in terms of cost expenditures. And we would be delighted if we were asked to participate in such a question from the government.

(Arthur Hartz): Thank you.

Coordinator: Once again, if you would like to ask a question please press star 1.

James Hadley: While we're waiting for your questions I want to remind you that the CISNET website is cisnet.cancer.gov, gov. If you're interested in other teleconferences please check out our website at advocacy.cancer.gov.

Rocky Feuer: And I just wanted to mention that we will be having additional webinars on the three other cancer sites that CISNET covers. And you can look on the CISNET website and we'll be sending out reminders of those. So that'll be – we're not sure of the order yet for breast, prostrate, and lung cancer.

Coordinator: Our next question comes from (Michael Thun).

(Michael Thun): Hi, yeah. It's actually (Tune). So, Rocky I understand you did stick with some colorectal and not get to lung cancer in this, but that you'll get to it in the future. But in the case of lung cancer is your modeling going to pertain entirely to sort of policy interventions and the affect they would have or is it a combination of clinical, and policy, and whatever affect screening may ultimately prove to have?

Rocky Feuer: Yeah, so in all three cancer sites, but in lung cancer as well, certainly different modelers focus on different aspects the trio of screening, prevention, and treatment. But in lung cancer there are groups that looking at treatment, and clinical outcomes, and care, and there are groups very, very interested in

looking at especially spiral CT screening for lung cancer. And, of course, almost all the groups are looking at tobacco control.

(Michael Thun): Thanks a lot.

Coordinator: At this time we have no further questions.

Rocky Feuer: Maybe give it another minute as people formulate questions.

James Hadley: And while we're waiting again I want to remind you that the CISNET website is cisnet.cancer.gov.

Coordinator: Once again, if you would like to ask a question please press star 1.

Ann Zauber: I would just like to say one thing about our models is that not only do we want to use our models in looking at policy questions. But we also are interested in what's the natural history for colorectal cancer.

A big issue for us is what – how long does it take on average to go from no adenoma or adenoma just beginning to a full scale invasive cancer. And this is something that we consider studies that have been published and go back and look at old studies each time looking to see how we can improve our models and even better describe the natural history disease which is quite a bit of heterogeneity between certain people that could have a fast growing tumor versus someone that might have a very slow growing tumor. So we work to improve the natural models in order to better use these models for policy.

Rocky Feuer: And this is Rocky Feuer again. I just want to indicate that other issues you could look at its capacity. So if you have a particular program to increase colorectal screening and you want to think about, you know, does a particular geographic region have the capacity for colonoscopies and flexible

sigmoidoscopies. You might be able to address that sort of issue through these models.

Coordinator: We do have a couple more questions. And our next question comes from (Michael Tune).

(Michael Tune): Yeah, hi. First of all I think this is incredibly valuable exercise. And I'm really impressed with the way that you're bringing it along. All of these issues involve multiple institutions and have big financial implications. So downstream do you envision that your main input is to sort of policy decisions is going to be through published results or some combination of published results and then supplementation to the key committees that actually make the decisions in these areas?

Rocky Feuer: Bill, do you want to just - maybe Bill would just talk about how the work with ARQH and there was – and the US preventative task force and that there was work with the task force when publications as well.

Bill Lawrence: Right.

Rocky Feuer: So maybe you could just talk about that as an example of working with a guideline setting group.

Bill Lawrence: Essentially ARQH supports the taskforce, although it is an independent group. What we do is provide scientific resources and meeting those resources and such. And so essentially as part of the colorectal cancer guideline updating the – we traditionally will do a systematic review, and this is currently being done through the OHSU Evidence Based Practice Centers.

In addition to that in this particular one the task force had specific questions, literature review really wasn't going to get at. And so this was why actually we took – we considered looking at modeling.

And in doing this, basically after originally discussing with Dr. Feuer and with Dr. Zauber and her colleagues in the colorectal group essentially what we did was sat down with the investigators and sort of hammered out what the issues were. What they could feasibly answer within a reasonable period of time. And, you know, rank ordering things, how important they were for the task force decision making.

Essentially this wound up as a report which is still being finalized. But essentially the way that it's going to be disseminated, in addition to the task force recommendations which will include a discussion of the modeling results there will be a publication in (annals) on the task force recommendations.

And my assumption is although I can't guarantee it there should be companion pieces on the systematic review and a companion piece on the modeling paper as specifically focused on the questions that the task force had. So our goal is to have this out in journal publication along with the task force recommendations.

Rocky Feuer: But I think the key was here that CISNET worked with the group – the policy setting group – guideline group and work through what – the sort of publication schedule and agenda that they wanted to have.

And so it could've ended up as a report, but in this case I think the task force wanted things to end up as a publication as well. But it's a joint publication with the task force not an independent publication of CISNET.

Bill Lawrence: And by way of comparison the CMS report that the CISNET investigators worked on is an independent final report. And you can find that on the CMS website. Dr. Zauber's slides actually had the URL for it.

Rocky Feuer: And that’s not published. Not a peer-reviewed journal, it’s a report?

Bill Lawrence: Correct.

Ann Zauber: We just finished it - turned it in December.

Rocky Feuer: Other questions?

Coordinator: Our next question comes from (Karen Dehahn).

(Karen Dehahn): Yes, hi. Thank you. I had wanted to know if the modeling is at any point going to include ethnicity information?

Ann Zauber We do consider race. We have models both for white and blacks. We’re considering putting in Hispanic and Asian. The SEER data doesn’t go back as far as we had for both white and black, but we definitely consider to bring in both Hispanic and Asian groups to our modeling we currently model for both whites and blacks.

(Karen Dehahn): Thank you.

Rocky: And our goal in CISNET is in the future to think more about health disparities and try to have the modeling address those issues. And if possible perhaps in the future go beyond racial and ethnic divisions of society to things like do people have health insurance or socioeconomic division to the extent that which data would support that.

Ann Zauber: Our current project with CDC is looking at people with low income or uninsured. So we are looking at that issue as you suggested Rocky.

Coordinator: Our next question comes from (Joseph Diaz).

(Joseph Diaz): Hi thank you for the presentation. It's very informative. I had a quick question about CISNET's projections. I noticed that the sigmoidoscopy and the colonoscopy are combined as endoscopy. Do you have any projections for each of those separate, sigmoidoscopy versus colonoscopy?

Ann Zauber: We did do all our results separate for (flex-sig) and for colonoscopy. I - just in terms of a picture I just had a (flex-sig) up there that was it.

(Joseph Diaz): Okay.

Ann Zauber: I didn't mean to give that impression. No, we looked at (flex-sig) also with and without biopsy. And with and without using (Hemocult Sensa) because that is one recommendations you do flex sig every five years and annually to do an FOBT. So we looked at that.

But, no, we do separate out the colonoscopy from the flexible sigmoidoscopy.

(Joseph Diaz): And how about barium enema?

Ann Zauber: We did not model barium enema. I know that it's one of the recommended guidelines. It's not being used that much in terms of when you look at the screening behavior and CTC is certainly come in there as the radiology tool rather than barium enema. So we did not specifically model barium enema. We certainly can, but for these reports we did we did not include barium enema.

(Joseph Diaz): Okay, great. Thank you.

Scott Gilkeson: Also on the website, the projections website, the table talked about endoscopy, because that's the way Healthy People 2010 objective is stated as endoscopy. But the models themselves and this information is on that page, but I didn't go into the details, did look at different attributes of colonoscopy and sigmoidoscopy in terms of reach and specificity and various other aspects.

Ann Zauber: And one reason for doing that is that the National Health Interview Survey used to ask about endoscopy. They didn't separate between (flex-sig) and colonoscopy. And when we were modeling what had been the prior use of such screening we sort of had to use those issues the way the questions had been formulated in the National Health Interview Survey. As of 2000 those two screening techniques have been separated.

Rocky Feuer: And I think, Ann, you can correct me if I'm wrong, that the healthy people goals used to state – be stated in terms of flexible sigmoidoscopy, but as time has progressed there's been a big substitution of colonoscopy for flexible sigmoidoscopy. And so in some sense, maybe the goals have not kept quite in times sequence with what's now popular in terms of the screening modality. Is that correct, Ann?

Ann Zauber: Yes, that is correct. In 1997 was the first time that really guidelines came out suggesting colonoscopy as a screening tool. Prior to that the ACS guidelines had been more for flex sig plus annual FOBT. So it made sense that the question came forth for endoscopy and Healthy People 2010 goals got put in terms of endoscopy. But the latest information from the NHIS is that colonoscopy screening is increasing and flexible sigmoidoscopy and FOBT has been declining in the last couple of years.

Rocky Feuer: So even though the goal read flexible sigmoidoscopy, because of the change in technology we've sort of substituted and used either one to sort of talk about meeting the goal. So it's us trying to synchronize technology and a goal that was set some years ago.

Ann Zauber: And in the cancer projection mortality website that Scott presented to you the endoscopy goal was a combination of people that had colonoscopy in the last ten years, or (flex-sig) in the last five, or an FOBT in the last two to three years. So we used a combination of screening that was achievable, because that's indeed the case here in the United States is there are multiple types of colon cancer screening and they are being utilized.

(Joseph Diaz): Thank you.

James Hadley: Do we have a question?

Coordinator: We do not have anymore questions.

Man: Okay, well I'd like to remind you if you have colleagues who could not join us today live they can view and listen to today's webinar in its entirety by going to the CISNET website, again that's cisnet.cancer.gov.

We'd also as always like to thank those behind the scenes who really make these teleconferences and webinars happen. Ms. Michelle Hathaway our health communications intern here in the Office of Advocacy Relations. And Ms. Denise Buckley of the Division of Cancer Control and Population Sciences. We also want to thank each and every one of our speakers, Rocky, Ann, Bill, Scott, and Karen, and Carolyn. Rocky you had something?

Eric Feuer: Yeah, I just wanted to clarify one thing. So when we post this webinar on our website it will be there in perpetuity. We won't take it down on March 29. So

I just wanted to clarify that so you could come back to that and see it for as long as you want.

Man: Great. So we thank each and every one of you for taking time to learn more about CISNET and the important programs here at NCI. Good afternoon.

Coordinator: Thank you for participating in today's conference. You may disconnect at this time.

END