

MADHAVI REDDY: Welcome to MCH Training. My name is Madhavi Reddy. Let's go over technical issues with the webinar. After I give you a little information about today, I wanted to let you know that the webinar will be through the Internet. I hope that you have registered and you are viewing the webinar through mchcom.com and I'll go over a few technical issues after I go over the purpose of the webinar today.

I want to say thank you to Dr. Margolis for agreeing to conduct the webinar with us today. He is joined by Linda Chewning, the project manager for the study we'll be talking about today. Lew and Linda are investigators for the study which include Dr. Karl Umble, Angela Rosenberg and Dr. Kathleen Rounds who is the project director for the social work program at Chapel Hill. I want to let you know that we're here today to discuss "The Effects of Interdisciplinary Training on MCH Professionals, Organizations and Systems". That's the interdisciplinary research study that was awarded to Dr. Margolis at Chapel Hill in 2007 so we're in the second year of that project. With the research study he's looking to evaluate the interdisciplinary training model on different programs in the UNC collaborative which includes the School of Public Health program, the social work program, the pediatric dentistry program and the nutrition program. All these programs work together in a consortium at UNC Chapel Hill and they're part of this interdisciplinary training research study. Through this study -- through this webinar, Dr. Margolis will present results of the study, look at the training on 208 student fellows and dental residents who participated in the UNC training program from 2001 through 2008. So we're going to be looking at two cohorts of

trainees. The first cohort we'll be looking at trainees from the MCH funded training program that participated in a year-long series of interdisciplinary leadership course work. And the second cohort we're looking at trainees from -- Dr. Margolis looked at trainings from public health and went -- who did not participate in the leadership workshop. So based on his -- based on looking at the results from these two cohorts he will present the findings from the study thus far.

Now I will go over just a few points about the webinar, the technical -- some technical points about the webinar. As you know, slides will appear in your central window and they will be forwarded on for the Center of the Advancement of Distance Education, CADE. The slides are synchronized with the speaker's demonstration. The slides will be advanced on our end.

We encourage you to ask the speaker questions at any point during the presentation. Please type your question in the white message window on the right side of your interface and select question for speaker when you type in your question. I will -- we will have a few minutes after the presentation by Dr. Margolis and during that time I will be asking Dr. Margolis and the co-investigators in the room the questions that you have submitted via your web interface.

Let's see, on the left of the interface is the -- you can adjust the volume of the audio using the volume control slider. So if you look for your volume control slider you can adjust the volume if you're having any issues with your volume. The other -- the last

point that I'll mention is that please stay until the end of the presentation because an evaluation form will pop up after the webinar has been completed so that you can submit your comments about the webinar that you have viewed today.

At this time I am going to turn the webinar over to Laura Kavanagh for a few minutes to talk about the interdisciplinary training research study.

LAURA KAVANAGH: Thank you very much, and to all of you participating in the webinar today also to hear the preliminary results from this R40 research grant to Dr. Margolis, the project principal investigators. It's making important contributions and a helpful and inform our training programs as well. This was an early effort to conduct research on areas to the training program and as Madhavi mentioned was funded three years ago. I hope that it will help us not only to better define exactly what we mean by interdisciplinary but also examine some of the effects and this research study is looking at it both individuals and also organizational and system impacts as well. At this point I would like to turn over the presentation to Dr. Lewis Margolis at the University of North Carolina in Chapel Hill. Welcome.

LEWIS MARGOLIS: Hello, thank you. Thanks very much. Thanks for that introduction. We're pleased to add our welcome to everyone to this webinar on the effects "The Effects of Interdisciplinary Training on MCH Professionals, Organizations and Systems" and I again would like to remind everybody that if you have questions during

this presentation, just type them into your web interface and we have our -- most of our team will be here to answer questions.

As we look at slide 4, I'm mentioning slide 4 for the people who are advancing the slides. I'm pleased to introduce our team of investigators. Angela Rosenberg from LEND, Kathleen Rounds from the school of social work. Jan Dodds from the Department of Nutrition and Michael Milano from the school of Dentistry. We want to also acknowledge two founding members of our consortium from the Department of dentistry. Our consortium lost our dental training program and lost our nutrition program but we gained a communication disorders program so our consortium has four MCHB funded training programs right now. On slide six we have Karl Umble from the North Carolina institute for public health who directs our evaluation and Linda Chewing who serves as the project manager bringing yet another set of discipline air eyes from her own background in rehabilitation counseling. In addition to acknowledging the members of our team we would like to thank Laura Kavanagh and her co-authors of the 2001 report on MCHB training. In a visit to Chapel Hill during the preparation of that report, probably ten years ago, Laura encouraged representatives of our five MCHB funded training programs to explore ways and to develop our leadership consortium which has led to our interdisciplinary leadership development program. Many of our listeners are familiar with the interdisciplinary training.

In the 1940s the Federal government first funded public health interdisciplinary programs followed by the LEND programs under assorted names to bring together

multiple clinical disciplines for research, training and a clinical practice with children with special healthcare needs. These were followed by programs for adolescent health and pediatric pulmonary disease. The bureau supports additional training programs considered single discipline.

On slide 8 we see two significant issues or questions that have emerged as these efforts evolved. One, the definition of interdisciplinary exposure has not been well developed in the field of MCH. As we launched this project we realized the need to define the exposure like a home intervention and or other clinical investigation, as we have the need to do that in "other investigation. We've undertaken an extensive literature review. We've talked about interdisciplinary including many colleagues across the country and developed a teaching tool or reflection tool we think will enable programs to reflect systematically about what we are calling the interdisciplinarity of their environments and we hope to have the opportunity to discuss this perhaps in a future webinar. The second issue is that while there is much literature on the concept of interdisciplinary as it relates to clinical effects of such care or practice on patients and families, there has been a lot of research on the effects of such training on the participants themselves, their practices and the organizations in which they work. This second issue is the primary focus of this project.

Slide 9 shows the background on the UNC, MCH leadership consortium that was launched in 2000 leading to the interdisciplinary development program which brought together post graduate students and postdoctoral fellows from the training programs in

this slide. LEND, nutrition, pediatric dentistry, public health and social work. The purpose is to address core MCH competencies that are shared by all training programs providing a training experience where trainees from many disciplines would have the opportunity to, or we could even say, be obliged to engage with one another.

Slide 10 outlines the curriculum of the program. The faculty have worked with consultants and more recently graduates of the ILDP. The Interdisciplinary Leadership Development Program to design and over these workshops. Orientation brings all the participants together to introduce the fellows and faculty highlighting the diverse disciplines represented in the program. Two additional purposes of the orientation are to outline the development goals for the year and provide background about the field of MCH and the Maternal and Child Health Bureau. The leadership intensive challenges participants to develop an awareness and understanding of their personal leadership styles and goals through a discussion of leadership models, analysis of individual and group personality dynamics and the writing of a leadership plan. They complete an assessment tool such as Meyers-Briggs, etc. after which facilitators help the participants with interpretation and application of the findings and guide discussions about specific aspects of leadership. In 2003 the consortium added a workshop on conflict management and group facilitation in recognition of the importance of these competencies. The cultural competence workshop is the product of a series of consultations with academic and community professionals about how to incorporate training on this leadership competency in the curriculum. These consultations were followed by an invited workshop conducted by the natural Center for cultural

competence. An important feature of this workshop was the consortium undertook the planning with the state title V program of North Carolina and subsequently a representative of Title V has become a valued member of the consortium representing an additional discipline. Beginning in 2005, this workshop has focused on cultural competence from the perspective of leaders and organizations. That is, addressing the barriers to and facilitators of creating agencies and programs that value cultural diversity. To enhance further participant attention to cultural competence trainees are expected to attend the annual student-run Carolina minority health conference sponsored by the minority caucus at the Gillings School of Public Health. The department of the family partnership workshop during the 2006-2007 academic year. That workshop was designed to introduce this topic to stimulate thinking about how such partnerships are relevant across areas of MCH practice. We've used a variety of formats to explore real-world in research, program planning and advocacy. Finally the reflection session held in the spring at the end of the ILDP is intended to assist trainees and faculty with integration of leadership lessons and personal leadership goals as they take the next steps in their careers. Specific learning objectives clue to assimilate lessons from workshops and permanent experiences, to further define individual leadership goals. To articulate strategies for further leadership development as a component of lifelong learning and prioritize recommendations for ongoing development and quality improvement of the UNC/MCH program. In the early years, the leadership fellows met for only three workshops during the academic year but over time the curriculum has evolved to include six workshops and participation in the

annual minority health conference. As our training programs responded to the leadership competencies articulated for the field of MCH.

Slide 11. The next two slides present the purpose and major hypothesis for the study. As you can see in this slide we wanted to investigate the effects of the program on attitudes and practices, as well as the impact of training on programs and organizations.

In slide 12 specifically we hypothesized that the ILDP has enhanced the capacity of the participants to engage in interdisciplinary practice and research and enhance the capacity of participants to effect change through policies, practices and programs.

Slide 13 outlines the methodology. Drawing upon our literature review, we developed a web-based survey that included scales for rating and ranking as well as open-ended questions requesting elaboration with explanations and reflections on selected issues. The survey required 30 to 45 minutes to complete. We have also conducted 14 in-depth telephone interviews with a sample of respondents to further elaborate on their findings.

Slide 14 shows that our study population was drawn from graduates of the five training programs. Extending from 2001 to 2009.

I want to highlight the MPH and LEND programs because we were able to generate comparison groups from those programs. Participation in the ILDP for those two large

programs was through a selection process. Some applicants were accepted and others not offered spots. This meant that we had large numbers of graduates from both of these programs interdisciplinary in their own right with which to compare our ILDP graduates. The other leadership development program participants represent all of the trainees in their programs so we did not have a ready comparison. Nevertheless, as we shall see, the trainees from nutrition, pediatric dentistry and social work report effect very similar to their colleagues from public health and LEND. All of these remarkable students are enrolled in a dual degree program so that they graduate with a masters degree in public health and a masters degree in social work. They are quite similar to the public health students overall.

Slide 15. It shows we're using SASS for our quantitative analysis and at last for our qualitative analysis. There is an error on the slide and we apologize for that.

The framework or model was based on a value lead as shown in slide 16. To quote from the authors of the evaluation model. As people begin to exercise their new learning and insights there is a corresponding increase in the quantity, quality, variety and duration of outputs, outcomes and impacts whose emergence they may have helped influences. This complexity of results builds from cohort to cohort. Soon challenging the abilities of program team members to keep up with, record, measure and assess these results.

Slide 17. To address this complexity, the evaluation -- through individual and organizational and system levels of effect. Within these domains there are episodic, developmental and transformative results. For example episodic are the cause and effect variety. The workshop enabled me how to recognize other viewpoints into a planning discussion in my health department. The workshop had a specific equipment. Developmental changes occur over time. For example, at first I was receipt sent to challenge my supervisor. As I practiced my conflict resolution skills I found we could build a stronger team. This reflects change over time. And then transformational changes represent fundamental shifts. For example, because of this program, all of my encounters with families reflect a holistic perspective. These lenses helped us development the questionnaire and have guided our ongoing coding of the qualitative data.

Slide 18 shows the sample of 208 respondents in detail. The overall response rate was 69% with a fair amount of variation among the programs. We applaud our dental and LEND leadership development program colleagues for their participation at over 80%. This slide suggests to us that we do have a valid sample of those who have participated in our program.

Slide 19 shows the three major components of our survey. We sought to capture in some detail the current work contexts for our graduates consistent with the he model. We developed questions on attitudes towards and current practices of interdisciplinary

in the day-to-day environments of respondents. We asked for their impact on programs and policies including barriers to interdisciplinary practice.

Let's turn to slide 20. As part of our interest in the organizational and systems level impact of interdisciplinary training, we requested respondents to characterize their professional responsibilities in the context of the now well-known MCH Pyramid. These are described on this slide. Infrastructure building services, population-based services, enabling services and direct healthcare.

Slide 21 shows the meantime spent in each of the four levels of the pyramid for graduates of public health and LEND. Let me point out that these percentages do not add to 100% because we have graduates who have continued their education, withdrawn from professional practice for family reasons such as child rearing or even switched careers. As we see in this slide, MCH graduates spend over 60 percent of their time, that's on the left, in infrastructure building services and lend graduates on the right over 50% of their time in direct care. What is noteworthy is the distribution of the levels for each group. While the largest in each group are as expected. Graduates as a group are clearly contributing to all levels of the pyramid.

Slide 22 shows the activities for pediatric dentistry, nutrition and the dual degree public health social work students. Dentists with their advanced clinical training are heavily involved in direct care but clearly have made commitments to other levels of the pyramid. Interestingly the social work graduates are deeply involved in infrastructure

building services. Nutrition graduates, all of whom have registered dietitian degrees as well, are involved in all levels of the pyramid bringing their interdisciplinary training to activities in addition to clinical, direct care. We intend to explore the relationship between these characteristics and interdisciplinary attitudes and practices in subsequent analyses.

Slide 23. Our review of the literature guided the development of five factors to characterize or define attitudes about interdisciplinary practice. Our research team reviewed multiple questions and ultimately crafted the following factors as reflecting the context in which MCH professionals practice. While shown here for a second, we can then move on to look at the questions that make up these factors. The questions that we are about to see were put into five point scales ranging from completely disagree to disagree to not sure to agree to completely agree.

Slide 24 shows questions that reflect team values as seen in words like helps professionals become more sensitive or interdisciplinary plans are worth the extra time, or item three, reduces duplication and fragmentation in the delivery of care or services. And item four, the group gets better results. These reflect the value of a team.

Slide 25, two questions capture the value of the interdisciplinary experience as seen in should be part of every health professional's pre-service training or question six was a negative phrasing about experience and we're still reversing that for future analyses.

The next three slides present single questions for the remaining three factors. Slide 26 asks about value of the contributions of others. I value the contributions of other disciplines to my work.

Slide 27 solicits attitudes about the interdisciplinary approach to practice.

And finally, 28 addresses teamwork and collaboration. I welcome the opportunity to collaborate with members of other disciplines.

Let's turn next to slide 29 to show how we try to capture practice experiences.

Following the same process of literature review and extensive discussion, we have identified three factors. Communication facilitation of interdisciplinary processes. Leadership and growth as an interdisciplinary practitioner.

Slide 30. The next two slides demonstrate the communication seems to be a central element of interdisciplinary practice because this category consists of ten questions or items. And I'll just pause for a second to read some of these.

And then let's move to the slide 31. The additional five questions. We plan to explore the relationships among these ten items further but for now we're using and reporting all ten.

Slide 32 shows how we have elicited leadership practices as assemble an interdisciplinary group and for number 12, coach co-workers in interdisciplinary practice. We recognize that leadership is a complex concept to measure. We felt these two questions seemed especially pertinent to interdisciplinary practice, per se.

Slide 33 shows the third factor that captures growth as an interdisciplinary practitioner reflecting both the developmental and perhaps transformational dimensions. Here we see use self-reflection and critically evaluate other information from other disciplines as reflecting growth as an I.D. Practitioner. For reporting results at this point, we're going to focus primarily on the MPH and LEND graduates because we were able to construct a meaningful comparison group. As we'll see, however, the experiences of the pediatric, dentistry, nutrition and social work fellows define the findings of these two groups. At this point we're reporting means for a rather small sample. Although these findings may not achieve statistical significance we believe the combination of the trends among these factors and the rich qualitative responses demonstrate the impact of the interdisciplinary training of the program which we have described.

Slide 34. It shows the first four components of team value for MPH graduates.

Let me set up this busy slide because it serves as a template for the data we're presenting today. The major column on the left shows the level of agreement with the statements that's in the dark blue at the very top. Beneath that header are columns for MPH plus the interdisciplinary leadership development program ILDP and MPH without the ILDP. The numbers on the far left refer to the items that we have just described. I'll note the other major column which talks about the strengthening the belief but will not address this until we review the LEND results. As we compare the first two columns, we see that the ILDP participants reported higher agreement for each component. As we move down the rows, 4.9 versus 4.7. 4.6 versus 4.4, etc. For example. Item one stated that providing services and interdisciplinary groups helps professionals become more sensitive to the diverse needs of consumers and patients than providing services as a single discipline. Participants in the ILDP were more likely to agree with that than the non-participants.

Slide 35. The next factor on the value of interdisciplinary experience, one component scores toward the non-ILDP group. The second component needs to be reversed but does reflect the impact of the interdisciplinary leadership development program.

Slide 36. The value of collective competence, the ILDP scores higher, 4.9 versus 4.7.

And then slide 37 the I.D. approach to practice, I value the contributions of others, the ILDP participants score higher.

While for slide 38 the component of teamwork and collaboration we see no difference. In summary, for seven of the nine components of the attitude scales that we have generated, the MCH participants in the interdisciplinary leadership development program were more likely to agree with the interdisciplinary attitudes. Let's look now at the attitudes of the LEND participants.

Slide 39. The nine questions relating to attitudes are shown in the tables over the next five slides. In addition to the level of agreement, I want you to note the additional columns that address the extent to which the programs strengthen their beliefs as we review these slides. Item one on this slide refers to providing services and interdisciplinary groups helps professionals become more sensitive to the diverse needs of consumers and patients than providing services as a single discipline. The ILDP participants reported stronger attitudes, 4.5 versus 4.4 in row one there and were more likely to agree that the program strengthened this belief. As we move over still on row one we see 4.1 versus 3.8.

Slide 40. For item 5, participants were more likely to agree that, quote, interdisciplinary education should be part of every health professional's pre-service training" and were more likely to agree the program strengthened this belief. We see 4.2 and 3.8 on that row on the right.

For slide 41, collective competence. I value the contributions of other disciplines to my work, ILDP participants were more likely to agree.

For slide 42 similarly we see the participants were more likely to agree with the statement when I look for my next position I will purposely look for an opportunity where collaboration across disciplines is the norm.

For slide 43, on teamwork and collaboration the same finding. For seven of the nine questions relating to attitudes, the LEND, ILDP participants reported stronger attitudes toward interdisciplinary practice and for all nine items they believe that the program strengthened those beliefs.

Let's turn to slide 44 to listen to students in their own words about the richness of this experience from a public health graduate.

LINDA CHEWNING: The interdisciplinary leadership program in which I participated was eye opening. Through different leadership exercises we were exposed to the various ways in which students from different health disciplines are encouraged to think and work. It taught us not only the importance of having different viewpoints but also how to approach group work, problem solving and conflict management with sensitivity and an open mind to different modes of thinking.

LEWIS MARGOLIS: 45 shows the words of a LEND graduate.

LINDA CHEWNING: The knowledge I have gained about other disciplines has helped me tremendously in my work evaluating students with special needs services. It is essential to have an understanding of all disciplines that work with a client and to understand the client's functioning in areas in which I am not an expert.

LEWIS MARGOLIS: I would like to add a quote from a social work student although it's not shown on the screen.

I felt that the personality tests we completed and the subsequent discussions allowed us to explore how other people and disciplines think about public health. These exercises taught me there is more than one way to view an issue and that having multiple perspectives strengthens the approach to the issue. These discussions also made me realize that people have different needs. When it comes to support and feedback in the work environment.

I want to pause here for a deep breath. Summarize how pleased we are with what we have found. The efforts of the MCH leadership consortium in crafting the leadership development curriculum that brought together students and fellows from five different training programs reflecting multiple disciplines has had an impact on the attitudes of participants. Changing or enhancing attitudes is the first step in behavioral change and ultimately on having an effect on practice and systems of care. What then can we say about interdisciplinary practices?

The setup of the slides is similar to those for attitudes. Slide 46. The next three slides show the responses from the public health students about the 14 practices described earlier. For example, on this slide for item one ILDP participants were more likely over the previous three months to, quote, resolve conflicts in interdisciplinary groups, unquote. Or for item two ILDP participants were more likely to facilitate family provider partnerships, unquote. 2.2 versus 1.7.

For slide 47, participants were more likely to assemble an interdisciplinary group for a given task, 3.9 versus 3.4.

And for slide 48, item 13, participants were more likely to use, quote, self-reflection to enhance their contributions to interdisciplinary work, unquote. Over these 14 items public health participants reported more frequent practices for eight.

Slide 49. The next three slides report the practice findings for the LEND participants. For all 14 items ILDP lend participants reported more frequent practice. Item seven shows participants are more likely to establish decision-making procedures in an interdisciplinary group, 3.1 versus 2.4.

Or on slide 50, item 11, participants were more likely to assemble interdisciplinary group members appropriate for a given task, unquote.

For slide 51, the two items on growth as an interdisciplinary practitioner, the results are similar. The following slides provide quotes from open-ended responses to requests for elaboration on practices.

Slide 52 is from a LEND practitioner.

LINDA CHEWNING: In my earlier work as a general pediatrician I referred patients to ancillary care providers such as audiology and others but never worked directly with any of the specialties. Through the LEND program I developed a better appreciation of the services they offer and how to incorporate them into patient care plans.

LEWIS MARGOLIS: Slide 53 is from a public health graduate.

LINDA CHEWNING: The biggest contributions, and they were really big, that the consortium activities made was, one, helping me recognize how our approach problems and situations and why and how that might be different from how another team member does. Two, how I can reframe someone else's operating style more positively as opposed to getting frustrated or see it was not having value. Three, how I see opportunities for leadership. It has always necessitate I had consulting people from other disciplines. The leadership training course gave me the chance to hear from people in other clinical disciplines in a setting that allowed more relaxed dialogue which wasn't focused on a particular situation or a particular patient. This has led me to value what people from other disciplines have to offer in a more general way.

LEWIS MARGOLIS: Slide 54 gives us words from a nutritionist.

LINDA CHEWNING: The program was very helpful in building confidence and leadership skills. For example, working with my peers and mentors on our hot topics discussions in conjunction with University of Tennessee was a great experience that allowed me to feel like I could work with a variety of different people and topics. I felt that my leadership skills were enhanced by the program.

LEWIS MARGOLIS: And last but not least on slide 55 we hear from a pediatric dentistry graduate.

LINDA CHEWNING: By working directly with other disciplines, we were able to develop professional relationships as well as personal friendships. This type of networking gives you all kinds of outlets to have at your fingertips when treating patients that may have needs outside your training.

LEWIS MARGOLIS: At this point we have reported on two major pieces of the puzzle. The curriculum of interdisciplinary leadership development has had an impact on the attitudes of students and residents in these five training programs. Building on these attitudes our graduates appear to have brought their interdisciplinary skills into their spheres of practice. We've just begun to explore participant reflection on the programs and institutions in which they are currently working but let's share a few of those.

And let's turn to slide 56. The next three slides provide a taste of these findings. Here we asked about barriers to opportunities to collaborate across disciplines. The dark blue indicates ILDP participants and the light blue the comparison groups available for the MCH and IEND program. As you can see they report many opportunities to use the skills that they have acquired.

Slide 57 shows the perspectives on how they are valued given that a key element of interdisciplinary practice is mutual respect among colleagues. While none of the groups exhibit much agreement with the idea that they are not valued, the nutrition graduates stand out from their colleagues, an issue we hope to explore further.

Slide 58. The role of categorical funding as a barrier to interdisciplinary practice is commonly posed. The groups did not differ in their views in this slide and basically categorical funding does not appear to be much of a barrier. They score around three. That is, they are not sure. This warrants further study. Categorical funding seems to come up in discussions of barriers of interdisciplinary practice that expects individuals to come out of their categorical silos. As I mentioned, we are just beginning to explore these findings.

Slide 59 provides some thoughts on what we have learned from this study so far. First, the structured intentional interdisciplinary program appears to have had an impact on attitudes about interdisciplinary practice and on the use of those skills as well. What is

noteworthy is that the two programs for which we have reasonable comparisons, public health and LEND are interdisciplinary in their own right. The ratings about interdisciplinary attitudes and the use of skills are high for these graduates. In many cases the ratings for those who have the additional stimulus of the ILDP are higher. In the language of today's stories about H1N1 vaccines, our interdisciplinary program appears to have given a kind of immunological boost for the interdisciplinary practice of these LEND and public health students. The quantitative and qualitative responses with our colleagues were very similar to those from public health and LEND. Suggesting that these single discipline graduates benefited from the interdisciplinary curriculum. Number two, in saying the program should think outside the box, we mean that we were willing to step outside our productive and often comfortable individual training grants in the year 2000 to explore what our common interests were in the development of MCH competencies. The pediatric dental program, for example, had tried different leadership development programs over the years since its inception in 1992. None of these sometimes very expensive trainings proved as effective or as satisfying to the dental residents and dental faculty responsible for them. And three, we are in the process of analyzing the effects on programs and policies but preliminary findings suggest that these graduates have taken these skills into their workplaces affecting change at that level.

Slide 60 asks what seems to be -- what seems to have been of value? What seems to be working in the curriculum that we have developed? Very briefly we have made a commitment to active learning processes in each element of our curriculum

recognizing the need for adult learning models. All of the activities in our curriculum incorporate practice on the spot. Any presentation leads directly to the opportunity to use the interdisciplinary skills that we're seeking to develop. Our leadership fellows develop goals at the beginning of the year as well as plans to help reach their goals. These plans may involve new behaviors committees or organizations on which they serve. Act being differently in a different setting. Course work or other activities. The faculty in each program met regularly with participants to explore how they were working on their goals. Each workshop is followed by a check-in with participants to encourage reflection on how the particular workshop informed and influenced their goals and how their skills came into play in the workshop. This is why we say that we held each other accountable in this curriculum. A final factor that we would like to mention is that in most cases the faculty and interdisciplinary leadership development program participants shared these learning experiences. Each year one or two faculty might participate in the leadership intensive and conflict management workshop. All faculty participated in the orientation, cultural competence and family professional partnership workshops. Faculty participation modeled the type of interdisciplinary skills we were trying to develop. We have the impression when faculty and students work together to address cultural competence and organizations, the lessons take on more salience for all involved.

Slide 61 is a closing thought before we take questions. Interdisciplinary practice involving Human Services, research and training is essential to the field of Maternal and Child Health given the complex issues and needs of this diverse population. Our

project suggests that the intentional structured interdisciplinary leadership development program built on principles of problem based adult learning has enhanced the leadership competency among MCH trainees.

Next slide. I guess it's for questions and answers and I'm happy to say that we have several of our team members here, Kathleen Rounds from social work, Angela Rosenberg from LEND and the Center for Development and Learning and Karl Umble from the North Carolina institute for public health. As you know Linda Chewing is here and we have Rebecca Costello, a student research assistant with us and I know she would be particularly happy to answer questions. So we welcome the questions. Thank you very much.

MADHAVI REDDY: Great. Thank you, Dr. Margolis for a wonderful webinar. I'm going to turn to the questions that we have so far. Please submit your questions if you have any. We only have a couple at the moment so please feel free to submit your questions as we are going through the questions that I have currently. I'm going to start with the first question. The participant asked please indicate where and when data from your study will be published and she says thanks for this important information.

>> Well, thank you for that compliment. We anticipate that the data will be available I guess by the fall. We're processing it now and preparing reports and papers by next fall, yes. So by the fall of 2010.

>> Okay.

>> We presented at several conferences so far. We had a poster represently at EPHA. We were at the AUCD conference. We have a presentation coming up a physical therapy conference. Next year there will be presentation at a social work conference as well. So we have a number of presentations that have been done and that are in the works. Let me just -- we're using a speakerphone so everybody can participate. Can you hear me okay?

>> Yes.

>> Okay, good.

>> We are waiting for more questions so at this time I'll ask Laura if she may have some questions for Dr. Margolis and the team there at UNC.

>> Because your researchers you're also part of this training program, can you reflect for a little bit about what you think the implications are for this for the broader MCH Training programs?

>> We're all thinking very hard here. Angela.

>> Well, I think it reinforces the notion that the LEND training is very effective despite the results of our LEND program on graduates and I was particularly impressed we're looking at cohorts of seven years, so these are individuals who are out in the field practicing in a variety of environments that have retained not only interdisciplinary attitudes but really reinforcing it in skills and practice. I guess a message I would say is, you know, obviously I would continue to support the LEND program but feel very strongly about that because I think it's one of the very few unique places certainly in the direct service world and as we look at community practices for interdisciplinary health professionals. In particular, though, I would encourage colleagues, LEND colleagues if they aren't already and many I know are, really to seek resources on various parts of the organizations or campuses or communities where they are where these programs are located the try to seek out engagement of broader disciplinary--

>> Kathleen Rounds. I think we've got a very unique situation here in that for so many years we've had a number of training programs, MCH-funded training programs here and we've been able to come together as faculty. I think we've addressed some of the barriers to collaboration as faculty and as departments at school and so that's made a huge difference. For me as a faculty member for director of a training program as well as tapping into the expertise of my colleagues from other programs, but also I think it's made a huge difference for the quality of the type of leadership training that the fellows in the social work program certainly get and I think in the other programs, too.

>> I would just like to add -- I think this is what you're asking about -- that we brought to this a degree of intentionality to bring the different disciplines together. And so it is interesting that even within the LEND program which clearly is very interdisciplinary or in the public health program, which brings together all kinds of disciplines, I think that kind of complacency can set in and when we do the kind of intentional program that we've done here, that we bring students from these different programs together and we have them work on these shared competencies, as we saw from these results, it has more of an effect. A more intention effect so there is something about walking the walk as well as talking the talk that I think is a lesson of what we have found here and I think we can say that we were all delighted when we saw these preliminary results because we were -- we wondered at the outset about what the impact of our interdisciplinary leadership development program would be. We wondered if we had enough of a dose to make an effect and it looks as if we have.

>> Okay. Thank you. I have one question that has come in. The question is how much did the ILDP cost and does it justify the cost and training in each of the programs? She says I may have missed this since I came in a little bit late but were the hours for the ILDP in addition to or part of the minimum training hours for each leadership training program?

>> Well, these are all -- all of our training programs are full-time training programs so we don't really think of them in terms of the number of hours.

>> I will speak from the LEND program. We look at long term trainees as achieving 300 to 500 hours of training and we do consider this an integral part of training and I would say it helps most trainees achieve that 500-hour level from a LEND perspective. I'll let my colleague from social work respond if there is anything there about hours.

>> I think we think of it as part of the training program. This is the interdisciplinary part so it is part of the entire hours of the training program. It is not an additional amount of time, I don't think. When they apply to the training program, they know that if they are going to be accepted into the training program, that this is part of our contract with them. That they'll participate.

>> So in terms of cost, this is a great question and we've been asking ourselves this for years now. Clearly, there are a couple of different components of cost and we cannot give you a good answer in terms of the time commitments of the faculty who are involved, but on the other hand we're all on MCHB training programs and we feel this is part of what our responsibilities are in terms of the training program. In terms of the training per se for the six sessions that we are having, over the course of the year it's about \$1500 per -- maximum per trainee. That covers maybe -- maybe less? No more than \$1500. Our largest single expense is the leadership intensive at the beginning of the year and then we have some expenses -- I don't know if I'm allowed to mention that we have meal expenses when we have evening workshops. So actually, the additional cost has been minimum and this year actually we -- really in the spirit of interdisciplinary, we have submitted essentially a blended budget to the bureau as

several of our training grants are undergoing renewal. So that we could figure out how to share some of these expenses in ways that will make the development -- the leadership development program that much more effective.

>> One thing I was going to add also. This is something that developed while we were developing the program and offering the program, we have brought in parents from the North Carolina family council, part of Title V and so each of our programs then is putting in money into this pool to support those parents to attend. And we see them now as a discipline. There is a group of them. We try to get about five parents that will go through the entire year's training. And so that's something that we write into our grant to support that.

>> I think it's made a huge difference in the -- just the dynamics of the training.

>> Having that family members there.

>> It's been great.

>> Okay, great. Thank you. I have a couple of questions that just came in. First question did any of the trainees earn classroom credit for participation in the ILDP workshops or is their participation completely outside the classroom? A second question from the same individual is at what point was the survey administered to trainees?

>> I'll answer the second one first. This was administered after people had completed the training program. So as brief as one year and as long as seven years after the completion of training. So this is definitely follow-up after the training. In terms of course credit, this is an interesting question. Again, this is an add-on. They don't register for this per se from any of the programs and I think I'll add that interestingly enough when we had the five different programs, now we have the four different programs, the way those programs provide stipend for their students varies so that, for example, social work participants, all of the social work participants participate in the ILDP and it's part of being a social work public health students they get a stipend for the participants from public health where we have 35 master students each year and we take three, four or five students for the ILDP, they do not get stipend. Some of the trainees may participate in the program but out of our 35 students many do not have stipend and so their only benefit is they receive the benefits of participating in the program.

>> I might just add from the LEND perspective and really speaking for the program it's been an interesting evolution and originally we felt that we could only allow a few of our LEND participants each year to participate in the advanced leadership training and it became very evident to us prior to us ever conducting this study that the benefit was so great that we felt like we were withholding so the whole group now is involved. I will tell you that it would be lovely to credit this as a one credit leadership component of our program and maybe we'll look to that in the future but these trainees could care less

about the credit. They want into the program and we have had folks come to us from outside of any of these training programs saying how do we get this? We've heard about it and we want to participate in this interdisciplinary experience.

>> One thing, this is Kathleen from social work that I should add about the benefit and this is one of the draws, I think, for the students is from the very beginning we're working with them to develop a leadership plan, a personal leadership plan that they can work on throughout the entire training and so as they learn skills let's say in conflict management they'll be able to think about how might I apply this in some of the leadership activities that I'm involved in the MCHB training program? I think that's something they graduate with. This sense of their own personal leadership development and how they are going to carry that on into the next. Oftentimes they're graduating and looking for professional positions. That's another big benefit that many of them have talked about.

>> Thank you. Next question. I think Dr. Rosenberg already alluded to the answer to this question but I'll just ask it again. Was there any family discipline trainees in your study and if so, what might we learn about training for trainees in that discipline? This is primary at the LEND-related question.

>> As Dr. Rounds from social work spoke of, we have now joined with Title V and we consider our Title V family council members as an active discipline in our training programs. So they all attend the workshops with our trainees and our active

participants. In particular we have a number of LEND trainees that are parents of children with developmental disabilities. They also each year participate in the LEND program, of course, and the additional leadership training. I will say that we -- just the presence of the parents, of course, throughout the whole training program brings an added dimension to every single workshop. So from the very beginning from leadership and we recently did a conflict training where parents brought up a number of issues that they spoke to. And so it was just incorporated automatically in the workshop. And then later in the year we have an intentional workshop to bring issues of parent/professional partnerships to the foreground. We have parents actively involved in how we develop that workshop and executing the workshop. The reason they weren't in the study is because of the time frame. We always have had parents engaged at some level but to have their full participation has really evolved over the last few years.

>> Just briefly. It is our intent in this last year to at least have some qualitative interviews with family participants. We've had good cohorts of family participants, three, four participants for each of the last three years and so it is our plan to get feedback from them about this experience.

>> Just to clarify, this is Laura. There weren't any respondents to the survey who identified as their discipline family member.

>> No, that's correct.

>> Okay. Thank you.

>> Okay. Next question. Given that you had a controlled group of LEND and MCH Training focused on interdisciplinary training do you think it provided the trainees an additional level of skills to change across interdisciplinary systems that they may not necessarily receive through regular MCH Training, providing them with the confidence to impact change?

>> We didn't get the question there.

>> Let me repeat it. Sorry. Given that you had a control group of LEND and MCH trainees focused on interdisciplinary training, do you think the ILDP training program provided trainees with an additional level of skills to impact change across interdisciplinary systems that they may not necessarily receive through regular MCH Training, providing them with the confidence to impact or affect change?

>> First of all, yes, our study did show that there was -- probably not to a level of significance but certainly an impact for this additional dose, as Dr. Margolis described. However, I will say that just from the basic respondent ends were very positive to the effect of interdisciplinary training. Throughout our think our LEND and social worker training responded they felt very positive about the interdisciplinary experience. What I do believe we did with this additional leadership training is a bit of an added emphasis

and I think it brings together folks from completely different worlds. For example, in LEND we have the multiple discipline. Clinical settings and in community settings. Working with family members and families. So it's very strong in an interdisciplinary nature. When we join it in a concerted effort and a very directed effort with the Maternal and Child Health Health trainees they bring a population-based focus that just adds an added dimension. I think it's a wonderful interaction in addition to, for example, dentistry social work. I think that's where you see a slight difference.

>> Karl Umble would like to jump in here.

>> One of the other effects coming together for the ILDP program was the leadership dimension. It's a three-day intensive in terms of self-understanding and self-awareness. There is a lot in there about understanding your leadership style. Understanding other leadership styles, understanding other legitimate ways to go about work and people really report very often that they understand their own style better, they understand better that there are other legitimate styles out there and rather than just getting frustrated with somebody across the table from them they understand that better and work more successfully with people of different styles. That's a real key outcome.

>> Thank you. I'm going to ask Laura if she has any further questions.

>> I just have one additional question. I know you're still in the midst of this study as well. Are there other areas of inquiry that this sparked for you now that you've seen some of the preliminary data from this study?

>> Thank you. One of the two questions that we mentioned at the beginning was how do we define what exactly do we mean by an interdisciplinary exposure? We have developed this teaching tool or this reflection tool that has 12 different dimensions that will -- and we're figuring out how to pilot this and learn more about it so that it could be used by programs to do a self-assessment or a self-reflection on the degree of interdisciplinary that they're reflecting in their programs, schools or in their institutions. That's one area that we are actively working on. Since you've asked the question, I think that we would like to have more information on the systems and on the practice level. So we've -- we have information on that from our interviews and from the survey and we think of that as a baseline to ask some basic questions and I think that would be the next step now to look at more detail at how these graduates are going about having an effect on their programs and on policy. We have some information, some very rich information on that but I think it would be a logical next step.

>> And this is Dr. Rosenberg from LEND. I would concur with what Dr. Margolis said. We were recently at a conference and presented a bit of information to the training directors and as a training director, I think this has just been a wonderful study for me personally because I really see what we're doing and where it's making a difference and how various facets of the program really truly are highlighted by the responses.

But I believe this teaching tool could have a strong impact on programs and basically as we go through and try to look at the nature of our organizations and the systems within which we try to execute these training programs, sometimes it's hard to really focus on the factors and the very forces that play. I think this program tool could be an asset certainly to training directors and directors of programs to really step back and use it as a reflection. Really for a process that they can conduct to see where they are and the directions they may want to strengthen and enhance their interdisciplinary experiences.

>> I just -- just to reiterate one that we mentioned earlier, Laura, that we are going to be speaking to the parents who have been involved with us who have been working with us over the last couple of years and we -- our excitement over the contributions that they've made to this collaborative effort is really palpable and we think that this relationship is something that needs to be explored and we're just -- aside from the pilot interviews that we'll do in the next year, this, I think, is something that is worth more explanation, more exploration. What does it mean when you bring trainees into systematic contact with parents to engage in training? Not to do teaching but to engage in training so they are all learning the same kinds of skills. I think that's an exciting thing to pursue. Kathleen, yeah.

>> Actually, that is what I was going to add. I'm participating as a participant in the last round of training and in our last training on conflict management and facilitation there were some very interesting kind of discussions that came up between trainees and

parents and now we're planning the parent/professional collaboration part. I think it's very different to have a nine month working together, training together everyone is on supposedly equal ground, parents and professionals, parents in this case trainees and so how is that different than -- what is the outcome of that or the process? How is that different than bringing in a parent panel in terms of people really understanding what that collaboration is about?

>> It's an understanding from both sides. From the parents understanding the professionals or the trainees as well as the trainees gaining a richer sense of how to collaborate with the parents. It's a two-way value system there.

>> Thank you very much.

>> Thank you. Well, it looks like we don't have any further questions. So at this time I'm going to say that the webinar today will conclude at this time. I want to thank Dr. Margolis for giving us a very informative presentation today. I would like to thank his co-investigators for being available to answer questions and I would also like to thank CADE at the University of Illinois at Chicago for working with us today to make this webinar available. I would like to say please fill out the evaluation form that will directly follow this webinar. You'll see it on your screen. Please fill it out and let us know what you thought about today's webinar. And I would like to say that if you have additional questions for Dr. Margolis, please send him an email at the address listed on your slide and I will, I guess, the next -- we'll have another MCH Training webinar in the near

future. Look for emails from us indicating the topic for the webinar. You should see a webinar announcement early next year. Early 2010. Thank you once again for participating and have a good afternoon.