

**The Challenge of Obesity for Policy Makers:
Recommendations for the Next Administration
Obesity Society
August 25, 2008**

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MORGAN DOWNEY: Any of the political party national conventions and so we're breaking some new ground here, which I think reflects the evolution of obesity. We've had the evolve, for some time where no one thought there was a public policy aspect or felt that this was more than a personal problem. So we've come a very long way in the last ten years.

Our panel today is full of the current and past Presidents of the Obesity Society. We work them pretty hard in our shop and they do a lot for us and they're extremely dedicated and committed to solving this problem that we have. I'm going to introduce our President Gary Foster. Gary's a Ph.D. He's head of the Obesity Research and Education Program at Temple University in Philadelphia. He's authored and co-authored more than 100 scientific publications, co-editor of two books and one of the most busy and involved people to get a hold of and to reach since he's traveling almost constantly and Blackberrying even more so.

So we're extremely fortunate to have him. He's had a very dynamic year at the helm of the Societies, going to pass the torch in a few weeks. So I'd like to invite up Gary to get us started.

GARY FOSTER, PH.D.: Thank you Morgan. Welcome everyone. On behalf of the Obesity Society, I want to echo Morgan's enthusiasm about the historical significance of this

meeting. Morgan has almost single-handedly thought of this idea some years ago and has executed it flawlessly. So I want to thank Morgan for his efforts in doing this quite historic meeting where we can get in both parties at a national level to think about the scope of the obesity problem and public policy ways to address it.

I just want to go through a few slides over the next couple of minutes about what the Obesity Society is, some of the history of how this meeting came up and then really get to the meat of the actions so that you can hear some experts give some comments about obesity and then get to our panel.

The Obesity Society has about 2,000 members in research and clinical care of obesity. It is the go-to society for a variety of stakeholders in terms of obesity is our sole focus. So although we're interested in diabetes and we're interested in heart disease and we're interested in osteoarthritis, economics, all the things that obesity is associated with, our sole focus is on obesity.

Probably the product we're most proud of is our journal called Obesity, which is the pre-eminent scientific journal in the field. We also conduct the largest scientific meeting in obesity in the world and that is being held in Phoenix this October just in about a month.

Our goals are broad but again focused on obesity. At its basis, we're a scientific organization. We work hard to

make sure that mythology is debunked about obesity, about its care, and about the people who suffer from it. We're trying to continually improve clinical treatment.

Obesity is a chronic, refractory, and quite serious condition and our efforts, over the last 26 years, have really tried to get the public practitioners and policy makers alike to take obesity seriously. That has some very practical implications in terms of improving treatment and it has some other behind-the-scenes implications like getting someone to pay for that treatment and treat it as the condition it needs to be treated as.

We do, I think, a great job on educating the professionals and public in terms of continuing medical education, collaboration with dieticians, and many others who are seeing the increasing number of obese patients across the country as we speak and also as this meeting attests to, we're promoting policy responses to the epidemic and Morgan has a long track record in this from his days in advocating to get the IRS to see obesity as a legitimate medical deduction to again, our meetings today and then next week in Minneapolis, St. Paul.

Also, I think where we've led the charge is to combat discrimination and stigma. I think really obesity, from our point of view, is the last acceptable form of bigotry. There may be other forms of bigotry out there and certainly there are

but this one is one that seems to be socially acceptable. It's still fun to make fun of overweight people, to tell jokes about them, to advertise or portray them I should say in situations that aren't very flattering and moreover aren't accurate scientifically.

So we're trying to get away from this notion that everybody who eats the same and exercises the same weighs the same. They don't. It's scientifically irresponsible and uneducated to take such a position. So we're really working hard in terms of slide sets we're developing, the kind of language we use in our meetings, the kind of pictures that we have policies on, about how we portray people's size and what that means to them and to us as a field.

So the programs that we're actively involved in this year, given the state of funding at the NIH but also given the need to rejuvenate our field and to keep it sustainable, we have a program to fund new investigators as a way to get them jumpstarted in their careers in a variety of different aspects of obesity research from molecular issues to epidemiological issues to policy issues. We're also recognizing excellence in a variety of different areas of obesity research in terms of lifetime achievement, et cetera.

An initiative we're particularly proud of is to really improving physician care. Because obesity hasn't been recognized as a disease that it is, there isn't a whole

subspecialty of sorts of physicians who are obesity medicine specialists like there are, for example, sleep medicine specialists.

With the work of Bob Kushner, Caroline Apovian who you will meet later, really trying to spearhead an effort to document this as a legitimate subspecialty, look at the educational requirements, the professional requirements, and that's a thing that will take some years to accomplish but we're really excited to be starting that.

Finally, we're working with community health centers. Again, one of the aspects, I think, that's unique about our society is that we're not just in one area of obesity. We're in anything that obesity touches, whether it's geriatrics, whether it's treatment, whether it's prevention, whether it's policy and this is obviously focused on childhood obesity, the rates of which have tripled over the last 20 years.

In terms of the historical context for this meeting, there was a 2007 Forum entitled, "What should the next President do about obesity" and this was held in D.C. in cooperation with George Washington University. What that conference did, it has a similar format to today's, but it had both representatives from virtually all of the campaigns on both the Republican and the Democratic side, Our point there was to try to get the respective campaigns to start thinking about obesity as a serious issue and what would in fact, the

next President do.

As you know, both here and next week in Minneapolis and in St. Paul, we're following up on those now that the candidates have been identified. Then next year, we hope, we will more than hope, we will have, the Obesity Society will have a meeting in Washington, D.C., our annual meeting and in conjunction with that, hope to welcome the new administration and to hear about their plans to deal with obesity from a policy perspective.

At the end of the day, our goal is really to inform concerned policy makers with what the best that we can offer from a research and experience perspective both experience clinically and experience from a public policy perspective.

I think if there's one thing I hope you get at least from my comments today is that obesity is not a simple condition. Clearly, it results from energy imbalance where more calories go in than go out but the factors that affect that energy imbalance are just partly understood at this point. It's just simple-minded at this point and I think not fair to people who suffer from obesity to say eat less, move more.

Again, people eat the same and exercise the same don't weigh the same and any approach that is more dependent on finger pointing and less dependent on research is likely to be flawed in the long-term. There are, on the good side, there are research advances, how hormones in the gut, how brain

neurotransmitters affect hunger, satiety in obesity. We're increasing our knowledge every day. There are strong prospects for better treatments, not cures but each year, we seem to be getting a little better at treatment.

So what's that mean for policy makers? In a couple of words, there are no easy solutions. So it's likely going to require a multifaceted approach because obesity is a multifaceted problem and our hope from the Obesity Society point of view is that conferences like these and subsequent discussions will help inform policy makers about the complexity but also about with our enthusiasm and our hope that something really can be done about this obesity epidemic.

I want to thank our co-sponsors both here at the University of Colorado who are co-sponsoring this as well as our colleagues at the University of Minnesota and the Mayo Clinic who are sponsoring both of these but also the one in the Republican convention policy forum in Minneapolis/St. Paul, also our colleagues at George Washington University who again, as I mentioned earlier, were with us from the very beginning last year in D.C. I also want to thank today's speakers.

It's probably not a one-to-one correlation but it's probably not by accident either that we have some of the best international experts in Denver and that the state of Colorado has the lowest obesity rates of any state in the country but we're really fortunate to have Drs. Jim Hill and Dr. Bob Eckel

who are going to be part of our expert panel this morning to lay out the facts and figures about obesity, the consequences and to give you the benefit of their expert understanding.

As Morgan mentioned, they're both former Presidents of the Obesity Society and Dr. Eckel is a former President of the American Heart Association and Dr. Hill currently serves as the President of the American Society of Nutrition. So we're lucky and fortunate that both Bob and Jim agreed to be with us today and we thank you.

I also want to take the opportunity to thank Sally Squires and Leslie Stahl. Sally, who will be moderating this conference today and Leslie Stahl will be moderating the conference in Minneapolis/St. Paul. With that, let me introduce Sally Squires who's a medical and health staff writer for the Washington Post for the last 24 years. She wrote a syndicated column called the Lean Plate Club for seven years, which generated over six million readers. She is now V.P. of Strategic Communications at Powell, Tate, Weber, Shandwick where she is also a Director of Health and Wellness Communications. Sally Squires.

SALLY SQUIRES: Thank you very much and I'm delighted to be here in Denver and I can tell you that in 2001, my editor at the Washington Post needed a new column and I happened to have a degree in nutrition and masters from Columbia and we decided that this column ought to be about eating smart, not eating

less, eating smart and moving more.

We came up with the name the Lean Plate Club and it was a multimedia column and I think what I learned about in doing it is how important this topic is to consumers at large. They are struggling with this. They want to know how to eat better. They don't want to be overweight if they can help it. they know that there are health consequences and they're just really looking for ways to combat this problem for themselves and for their children.

Just before I left the Post in May, and I'm one of the many as journalism is changing, I'm one of many journalists who are evolving into new careers and before I left, we did a major project on childhood obesity and looked at it both in Washington where it is a significant problem as well as throughout the country and found that there are obviously serious, serious problems but there are also some really hopeful possibilities ahead. I think that's what you're going to hear a lot about today, about what we could do and how we can combat this problem to make things better for all of us.

We have a wonderful panel that is here for us and I hope actually I'm going get to work with some of them in my new capacity where I am Senior V.P. and Director of Health and Wellness Communications at Powell Tate/Weber Shandwick, which is a company that works with governments, non-profit, and for-profit companies to help with strategic communications in a

variety of ways. I know that there are some really important health issues that can be worked on no matter what the next administration or who the next administration is. So it's a very exciting time.

What we have today, we have with us, you've already heard a little bit about them. They're two long-time sources of mine and I can tell you that in many to date [misspelled?] on deadline crunch, I've called their phones and said help. I need to talk to you about these issues and they've been extremely helpful.

We have Dr. Jim Hill who is in Denver. He is Past President of the Obesity Society and Professor of Pediatrics and Medicine and Director of the Center of Human Nutrition at the University of Colorado in Denver. Dr. Hill is also, as you heard, the current President of the American Society of Nutrition. I know him best because he started this great program about helping Coloradoans move more and he's taken that nationally. I'm sure he's going to tell us a lot of very interesting things.

The second panelist today is Dr. Robert Eckel who is a Past President both of this society as well as the American Heart Association and has held many other esteemed positions at similar organizations. Right now, he is Professor of Medicine and holds the Charles A. Thatcher Endowed Chair in atherosclerosis at the University of Colorado at Boulder. Yes,

I think you will really enjoy hearing from both of them.

Then we have Morgan Downey who you have already met who's the Executive Director of the Obesity Society. So I'd like to welcome those panel members up here and we'll start with the various presentations. See, they're already using a few steps to get up to the podium. Jim is the one who taught me about using a pedometer.

JAMES HILL, PH.D.: Great. Well thank you and for those of you who are out of town, welcome to Denver. This is absolutely one of the best times of the year and I hope you get a chance to really see some of the city. My task this morning is to talk a little bit about the prevalence of obesity and the consequences. I suspect that many of you know that obesity is a problem and just wanted to take a few minutes and really walk through what we know about rates of obesity, how they've changed over time, some of the global implications. This is not just a U.S. problem.

In fact, did you know that Australia's now claiming they're the fattest nation in the world? They're claiming that they're fatter than the U.S. So we have to rise to this challenge.

So, quickly, when we talk about obesity, we base that on body mass index and I'll be using the terms normal weight or healthy weight, overweight, and obese and just quickly so you know what that is. A normal body mass index would be 18.5 to

24.9. Overweight would be 25 to 29.9 and 30 and above would be obesity.

So for simplicity, I'm going to talk about those three categories. Those of you who are in the audience who haven't calculated your BMI, there are lots of really neat charts like this. You can go on the Internet and put in body mass index and it gives you really easy ways to calculate your body mass index.

So given that, what is happening in terms of body mass index in the U.S.? So here we go. this is actually measured height and weight. I'm going to talk about two ways of assessing obesity. One is actually measuring people, their height and weight in representative samples of the population. The other way is telephone surveys where people tell us how much they weigh and how tall they are. We know that people never lie about that. So the point is this is actually measured. The telephone survey is probably a little bit of an underestimate but here we go.

So back in 1960, when we really started to get this information, there was some overweight and obesity but it wasn't very much of a problem. When Dr. Eckel started in this field, people thought you were really strange that you were interested in obesity because it was one of these things that were out there but nobody really cared about it. It wasn't a public health issue at all but if you look at what happens over

time and let's take here. Let's take obesity in adults 20-74 years up until about 1980, it was creeping along at about the same rate. Look at what happened suddenly in about 1980, it started going up.

Now overweight has stayed the same but essentially what's happening is people are going from normal weight to overweight to obese. So this is sort of a middle turnover area. So these overweight people each year are becoming obese but if you look at the combination of overweight and obesity, so these would be people with a BMI of 25 and over, look at the increase over time. This is creeping up and up and up. Now, it's not just in adults. It's in kids too.

Now we don't use the term obesity in kids. That's a very controversial term but we talk about overweight and at-risk for overweight but just in six to 11-year olds or 12 to 19-year olds, you see that same increase in about 1990 where obese rates started going up.

So really from 1960, rates of obesity in adults have doubled. They've actually tripled in kids and if we put at-risk for overweight in, it would pretty much double this area.

Now there's some indication in the last couple of years that rates may have stabilized a little bit in some groups. I think it's too early to say. I'm generally an optimistic person but it's very, very hard for me to think that we're making any progress especially when we see this. It's really rising in

kids and what we know is that most overweight kids do not outgrow it. they become overweight adults. the older you are with obesity, the more likely that's going to track into adulthood.

Now what I want to demonstrate is that this epidemic and we use the term epidemic, seems to affect everybody. It's not just that one certain group is gaining weight and we can put our attention to that group.

So here are men that trends over time. You can see from 1970s to 1999, every age group increases, increases, increases. We can see the same thing for women. So again, looking, whatever your age group here, over time, obesity rates increase. So in adults, it seems to hit everybody. I could show you that rates have increased for rich people, for poor people, for people in urban areas, for people in rural areas. Any way you slice it, the population seems to be gaining weight over time.

Now here are adolescents for example, 12 to 19, boys and girls. Look at the huge increases. So in 1991, childhood obesity wasn't really very much of a problem and now it's tripled to the point of where probably a good quarter of our kids have weight problems, either overweight or at-risk for being overweight.

So it's a problem that affects everybody and Gary talked about the complexity here and that's another degree of

complexity for the policy makers in that we can't just go in and target one subgroup and say if we put all our efforts into rural people or urban people or socioeconomically deprived people that we would fix it. In fact, it's not the case. We have something that's affecting everybody.

So where are we right now? Here's sort of a snapshot of where we are. Thirty-three percent of adults are at a healthy weight. Think about that. Only one-third of people are at a healthy weight, which means that if you're walking down the streets of most major cities, two out of every three people you meet are going to have a weight that can negatively impact their health. About 35-percent overweight, 32-percent obese. Together, 67-percent, two-thirds of the adult population are overweight or obese.

If you look at kids, still most kids are at a healthy weight but it's disturbing that about 17-percent are at risk for overweight, 18-percent overweight, and I drew these areas here because that seems to be what's happening. Every year more people go from this category to this category and from this one to this one. Over time, we're gradually showing an increase in overweight and obesity.

Now here's the data from the telephone surveys and I had to show this because I want you to make sure that you understand Colorado is the leanest state and that's totally due to Dr. Eckel and I. We would like to take 100-percent credit

for that.

Every year when this comes out, I know Bob gets these calls too. Why is Colorado the leanest state? The end of the day, I'm not sure we totally know but I do think there are some things going for Colorado that include a great climate where people can be outside, educated population, but more than anything else, I think there's more of a culture of health in Colorado. A lot of people move here for lifestyle. I think, at the end of the day, if we're going to address obesity, we have to get beyond behavior and actually treat it as a cultural issue. I think it is one of the reasons why we're the leanest state.

I wanted to show you that even though we're the leanest state, I want to track our progress over time. So here is the U.S. and again, these are self-reported height and weight. Increases in the U.S., this is Colorado. So you can see that, unfortunately, we're tracking at just about the national rates. So even in a state like Colorado, even where there's the culture of health and wellness, people are going in the wrong direction. So every year, we're climbing up.

Now we think that we want to be out in front of this issue in Colorado and our goal is nothing short of being the first state to show obesity rates declining. That's a huge challenge but there's a lot of effort going on here in Colorado to try to make that happen.

I wanted to show you that it's not just a U.S. problem. Here's U.S. men and women but look at Canadian and Mexican women. They're catching up, even in North America. Other populations are catching up with the U.S. Here's Europe. U.S. is still out in front here. Finland, England, Sweden, now Cuba is an interesting situation because you actually got these huge declines and then increases.

Anybody know why that is? This was the collapse of the Society Union where suddenly there was a food shortage, not starvation, but people had to eat less. There was a gasoline shortage, so they had to move more. It wasn't voluntary and what happened is huge declines in obesity and yet, when they recovered, what happened? Right back up and so now they're on the track to catch up with everybody else. It shows that it will work if you can do it but it's hard to get people to do it.

Here are some other nations that you might be surprised, Saudi Arabia, who knew that there were huge rates of obesity in Saudi Arabia? China, we just saw two weeks of China on the Olympics, China has a huge obesity rate and actually, this is school-aged kids, I'm sorry. Look at what's projected in China. So in 2010, the rate of childhood obesity in China will be about what it is in the U.S. right now. So just like they're catching up in many other areas, they're catching up in terms of obesity rates.

So why do we have this obesity? Well folks like Dr. Eckel and myself go back to it's a balance between intake and expenditure. Now as Gary said earlier, this is hugely complicated. There are amazingly large numbers of factors that influence intake and influence expenditure.

So we're eating, we're being physically active. We're failing to be physically active but over time, the only way that these obesity rates can increase is that we're eating, we're taking in more than we expend. Now the solution isn't simple. You might say we'll just eat less or just be more physically active. It's part of the solution. There are genetics involved. There's behavior involved. There's the environment involved.

So as Sally mentioned, I'm a big fan of walking and I really try to tell people to get out and walk and people say my neighborhood's not safe. I don't have any place to walk. In other words, just say walk more sounds simple but when you look underneath that, do you have a place to walk? Do you have a time to walk? Is it important that you walk?

So on one hand, it is intake versus expenditure. What this suggests is that over time, over the last 28 years, the population has been in a situation where, over time, energy intake is exceeding energy expenditure.

So if you look at the distributions of body mass index and you compare 1976 to 1980, what you can see from the blue to

the red is everything shifted to the right. So people that were lean are getting heavier. People that are heavier are getting even more heavier. The whole population shifted to the right suggesting that people are gradually gaining weight.

Now when we've looked at this, here's the good news. The good news is people are only in a slightly positive energy balance state. So we're not eating 500 calories more than we expend. We're eating maybe 15, 20, 100 calories more than we expend. So it's this gradual state of gradually gaining weight. In Colorado, we started a program called Colorado on the Move and America on the Move is a national version to say even small changes can prevent this gradual one to two pounds that most people gain each year. Who notices one to two pounds in a year but ten years later, 20 pounds.

So one of the approaches that we can use is actually preventing this further increase in weight gain and that can be due to small changes. Now if you're talking about taking someone that's obese, producing and maintaining significant amounts of weight, it takes much larger changes but the point is we can start with small things like walking more and we can have an impact.

Now Dr. Eckel is going to go into detail about some of the negative consequences of obesity but I put up this slide as my simplistic way of looking at what's happening in terms of obesity. As the population goes from lean to obese and, in the

U.S. that's already happened, all kinds of systems are affected but the real big one is diabetes and Bob will talk in detail about that. If we have an epidemic of obesity today, an epidemic of diabetes is coming. It's a certainty. It's not an if, and, or but. It will occur. Beyond that is coronary artery disease and even strong associations now between obesity and cancer.

So imagine this as a giant tsunami going from left to right as the population increases in weight, we're going to have more and more of these things occurring. So weight gain accelerates the progression of chronic disease. Now that relates directly to health care costs.

So here is a slide from a paper in the Archives of Internal Medicine looking at the effect of obesity on expected lifetime medical care costs. This is in men but similar thing in women. So you can look at as body mass index goes up, the lifetime medical costs go up. It's true of every single age. So put simply, being obese increases medical costs. It does because of the relationship between obesity and chronic diseases that I showed you in the previous slide.

Now here's another way of looking like that, it's comparing the health care costs among BMI less than 25 with those of more than 25. So this is the difference between being at a healthy weight and being at a BMI of 30 to 34 or being greater than 35. You can see that compared to being at a normal

weight, being obese or being really obese increases health care costs.

So the economist, Eric Finkelstein, has really looked at estimating the cost per state associated with obesity. So he tried to, using existing data, to quantify the state-by-state expenditures. What he did was to sort of look at how obesity contributes to diabetes and heart disease, and so forth. So there's a lot of methods where he used to look at how obesity contributes to the disease but what he came out with were annual medical expenses attributable to obesity in selected states.

So you can see here are just a sample of states and the total millions in health care costs in Medicare and in Medicaid. So what it really does is to bring this home on a state-by-state level that obesity rates certainly contribute to overall health costs but they're really important to consider at a state level because they're contributing significantly to state costs of health care.

Now, this is the slide I showed you before of the health consequences of obesity. Now there's good news here because there's a lot of new science to suggest that all of this is modifiable. So we're doing work right now looking at weight loss to prevent recurrence of breast cancer. It looks like managing weight is a great way to reduce the recurrence of breast cancer in women who had breast cancer. So even out here,

managing weight can have a big effect.

Gary Foster and I are involved in a large NIH trial looking at people with type II diabetes and whether weight loss and lifestyle modification can prevent cardiovascular disease and so far, I'd say the data are very encouraging.

Another large National Institutes of Health supported study showed that modest weight loss and lifestyle modification can prevent diabetes in those that are most at-risk and you hear more and more about this idea of metabolic syndrome or prediabetes. There are millions of people that are just on the verge of developing diabetes and very modest weight loss and lifestyle intervention can dramatically reduce the risk of that.

In my mind, here's really the bulls-eye that all of these chronic diseases can best be managed by preventing them and preventing obesity is probably the best bang for your buck in terms of preventing managing diabetes, preventing managing heart disease and preventing managing cancer.

Now this one's hard. I wish I could be up here and tell you that we're better at doing this than we are but what we've been looking at are the consequences of obesity trying to manage these diseases. Here's where we have to put our efforts. we have to put our efforts in keeping people from becoming obese in the first place and we do that by preventing weight gain.

So let me conclude by saying most Americans are overweight or obese. Think about that. The majority of people in the U.S. are overweight or obese. Normal weight is a minority. I think obesity rates will likely to continue. There may be a little bit of plateauing in some groups. I hope that's real.

I'd like to be optimistic but when I look at what's happening with kids, it's hard for me to believe that rates won't continue and we have colleagues that have actually predicted that we're all going to become obese. That that's the most likely outcomes that we won't turn this around. We'll simply give in and say we're an obese species. I would hate to see that.

Obesity negatively impacts most body systems leading to chronic disease and Dr. Eckel will talk much more about that. High rates of obesity are driving high health care costs and I don't see any way that we're really going to get a handle on health care costs unless we tackle obesity and that's why I think it's so critical that the next administration consider policy approaches to managing obesity.

Addressing obesity may be the best way to reduce rates of chronic disease and reduce increases in health care cost. We've got to get serious in this country about tackling this disease. I think we're going to need lots of different approaches but certainly we're going to need policy approaches.

Thank you very much [applause].

SALLY SQUIRES: Thank you very much Dr. Hill and I should just ask is anybody out here a member of America on the Move? There's hope. Oh yes. Okay. Well I encourage you all to check this website, which you can do a Google for. It's a program that started here by Dr. Hill in Colorado. It's nationwide and it's a terrific program. It's free and it's a great way to get people moving and just remembering that those small changes really do add up to big rewards. I could tell you we saw that a lot with Lean Plate Club members.

So our next speaker is Dr. Eckel and I should also tell you that we will have time after Dr. Eckel and Morgan Downey speak for questions. We really welcome a dialogue here. So Dr. Eckel, without further adieu.

ROBERT ECKEL, M.D.: Thank you very much Sally, I want, like Jim, want to welcome you to Denver and hope your weather here is really wonderful particularly on Thursday night right. the Republicans are praying for rain but anyway let the weather be what it is and I'm sure we'll leave here encouraged by the events that take place this week.

I consider actually one of the greatest accomplishments that I've been privileged to be part of over the years is recruiting Jim Hill to come to Colorado and that was in 1992 from Vanderbilt and our collegiality has meant something very special to me personally and I want to thank Jim for continuing

to be part of the effort we have at this university in terms of understanding the science of obesity and how to prevent and treat it.

So my talk title today really is going to be a little bit different than is listed in the pamphlet but I'm going to be focusing on two aspects of obesity. Jim set the stage for one of those and that's of the health-related issues. So I am a physician. I have a clinic. I see patients with obesity week after week after week. So I deal with this problem frequently as a clinician.

The second thing I want to focus in on is the whole aspect of prevention. So you have seen the map and I'll not gloat on the map but nevertheless, the rates are increasing here too and believe me, we have people with BMIs above 40 here that we see all the time in clinic and often are capable referring them for definitive treatment for surgical intervention, which by the way, appears to be the only obesity treatment that is associated with prolongation of life.

Now that's kind of scary because obesity surgery is not cheap but yet it's the only area in which we can have people lose weight and maintain it long enough to have an all-cause mortality benefit to follow. So let's keep that in mind as we think forward in terms of how policy can relates to health care of patients with obesity.

Now here's a slide that's dealing with the medical

consequences of obesity. I'm going to go around the clock a bit just to make sure you're well informed that obesity hits almost every organ system in the body. Pulmonary function is modified in obesity. In fact, National Jewish Hospital here in Denver is the world's number one hospital in respiratory and immunologic disease and the scientists at National Jewish and myself at the University are going to get together on a program project to understand how obesity reflects on the natural history of pulmonary disease including asthma.

So this is a very important area and one of the most common things we face as clinicians is the disorder of obstructive sleep apnea. You women see your men snore all the time. That's something that needs medical attention because as snoring continues, oxygen levels at night can drop. High blood pressure can be created across the lung circulation and ultimately heart failure could be a long-term consequence of obstructive sleep apnea, much more common in men, much more common in patients who are overweight.

The second is non-alcoholic liver disease. I mean in general, you think of cirrhosis as somebody that just drinks too much and then has end stage liver disease and either dies or gets transplanted at a fortune [misspelled?] for liver disease. But with the obesity epidemic before us, it's becoming clear that hepatic steatosis or the deposition of fat in the liver is a common consequence of obesity but moreover,

there's a condition called steatohepatitis or abbreviated, NASH.

And NASH is an inflammatory disease in the liver, which may represent up to 20-percent of people with obesity that have fatty liver. And it's predicted within the next 20 years that obesity-related liver disease may be the most common cause for cirrhosis and hepatic transplantation. That's pretty scary.

Next is gallbladder disease and we certainly know that being female, being on the obese side, and being about the age of 40 are the classic risk factors for gallbladder disease, but now we're appearing to see much more gallbladder disease in men also with obesity.

Gynecologic abnormalities are very common. Women with irregular menses, infertility, polycystic ovarian syndrome, are all related to excess body fat and the joints. It's interesting, it's not always the knees, the hips, and the ankles where you think obese people should have problems. Often one of the major joints where in patients present with symptoms are the wrists and the elbows.

That doesn't seem initially to make much sense but if you think about it, when obese people need to get up from the seated position, they push down with their upper extremities and the wrists really pay the price long-term of the excessive body fat that, where in gravity, needs to be ultimately altered to get them to a rising position.

Gout, then we're going to get into more really concerning issues. Idiopathic intracranial hypertension is a rare condition but in children particularly relates to obesity and can be the cause of substantial consequences including stroke and related disability and/or death. Stroke is not only true of the intracranial hypertension in children but also seen in adults with risk factors for cardiovascular disease.

Then there's the coronary heart disease, congestive heart failure relationship and this, to a large extent, is related to disorders that lead up to coronary heart disease including much more diabetes, much more dyslipidemia, low levels of good cholesterol or HDL cholesterol, higher levels of triglycerides, and more variable increases in LDL cholesterol and high blood pressure present in up to two-thirds of patients with obesity as adults.

Then the cancer risk is substantial and I'll get into that in a bit more detail in a second. Then finally, we're talking about phlebitis and phlebitis occurs when the legs become more dependent. The varicosities develop and ultimately inflammation and clots can be formed in the leg and that may ultimately lead to pulmonary embolism, which I list up here on the left under pulmonary disease associated with obesity.

So this is a brief list in summarial form of the medical complications of obesity that really come to the attention of all physicians and primary care or beyond who deal

with obese patients. Now particularly relevant is where you put your fat. Now we think about hazardous waste all the time that this is a particular form of hazardous waste that I don't think we pay as much attention to.

Now if you're a woman, you've got a chance to put that extra fat in your pelvis. If you're a woman, you don't like your shape but that fat is below the waste, your consequences medically are probably minimal if any but guys don't have much of a chance. Where they put extra fat is almost always around the belt line and that is associated with increases in intrabdominal fat here. We know from a variety of studies now that the positioning of fat within the abdominal cavity, which predicts a larger waist circumference, is associated with what we call the metabolic syndrome.

Now the metabolic syndrome is a clustering of three or more of the following characteristics. It's this big waist circumference and here are the circumferences that are given, 40 inches for men, 35 for women, triglycerides above 150, HDL cholesterol less than 40 for men and 50 for women, blood pressures above 130 over 85 or being treated for hypertension, and finally a fasting glucose. Initially defined, it's above 110, which is not a diabetes range glucose but more recently redefined is a fasting glucose above 100.

Three out of these five constitute the metabolic syndrome and the concerns about the metabolic syndrome is the

fact that the relative risk for heart disease is some 1.5-fold higher than it would be without the syndrome.

Now this area has been quite controversial because some of the skeptics say the metabolic syndrome includes components that ultimately provide additional risks and they're not convinced that the syndrome adds additional value to predicting heart disease but nevertheless, the metabolic syndrome does relate to an obesity-related clustering of risk factor for heart disease and not heart disease only but diabetes.

This slide shows body mass index from less than 22 to above 35 and the risks for new onset type II diabetes, as Jim Hill said earlier, the relationship between excess body fat and diabetes really begins in the overweight category but becomes much more exponential in its slope as BMIs get above 30.

So diabetes and heart disease presently, according to the U.S. Public Health Service, are coronary heart disease equivalence. In other words, if you have diabetes, you're considered to have heart disease because the mortality from diabetes is identical to people with heart disease who've already had a heart attack.

So this obesity/diabetes connection, as Jim said, really is a very relevant topic for disease prevention and chronic disease model modification as we move forward.

Finally, a recent review in the Lancet just in January this year related to multiple kinds of populations from around

the world. This reviewed the relationship between being obese and having risk for cancer. The list was impressive but having a relative risk of at least 20-percent above background risk were included for men for esophageal cancer, thyroid cancer, colon cancer, and kidney cancer, and for women, for endometrial carcinoma, the uterus, a substantial risk, gallbladder cancer, esophageal cancer, just like men, and kidney cancer, just like men. So cancer is not to be ignored.

In terms of problematic areas of mechanisms and they're understanding, this is an area that's a total black box. We don't understand, in any way, why obesity creates so much risk for cancer other than perhaps endometrial cancer, which probably relates to the excess levels of estrogen in women who carry more fat than women who have less fat.

Now I had the privilege, a few months ago on March the fourth of this year, to travel to the Pennington Biomedical Research, which is an LSU connected facility that deals exclusively with obesity science. They have now over 100 scientists there doing all kinds of research on obesity. This was its 20th anniversary in March of this year.

The topic I was given was to predict where obesity research should be focused in the next decade and I listed four areas in which I felt obesity science, if furthered, could ultimately lead to better strategies, to prevent and ultimately modify the natural history of obesity-related disorders in

patients with obesity.

The first area that I emphasized is a better understanding of the body weight regulation and how that occurs. Let me give you an example. I have a study that I'm nearly completing right now where we've asked people to volunteer for liposuction surgery. Now these are not people that are overweight or even obese. Yes, a few are a little bit in the overweight category, BMIs above 25 but many of these are people whose BMIs are less than 25, mostly women. We have a few guys that participated but the study was this.

Volunteers were then randomized into a no-surgery group or a surgery group and then the group with surgery and without surgery had fat biopsies done at baseline, six weeks, and six months later. We followed these subjects now for one year. Now these data are not ready for prime-time because the one-year data are not quite complete but I can say with some degree of confidence that after one year of liposuction surgery, all the fat's back. Now what is that? that's the physiological regulation of body fatness. So here's science that suggests even taking five pounds out by liposuction surgery, within a year, the fat's back.

Now all you ladies who are maybe thinking about cosmetic change here, this fat doesn't come back where it was taken off. It comes back elsewhere but it's possible that where the fat comes back is not to the benefit of health. We don't

know that yet but here's just a hint, the idea that body fat is extremely well regulated. We don't have the technology to be able to measure those eight to ten calories in excess a day that predicts the one to two pound weight gain over a single year, a very important area for research.

The second is in epigenetics. To simplify, epigenetics are not in the DNA but what happens to the DNA after the genes are there and available to be expressed, how gene expression is modified by say the intrauterine environment or early life experiences. It modifies the risk for obesity as an adult.

The third is obesity therapeutics. We do a poor job of treating obesity. Once people are obese, yes, they can lose weight. Can they keep it off long-term? Less likely but some still are successful. In Jim Hill's study with Rena Wing in looking at those people who've successfully lost lots of weight and kept it off for years is really evidence that it can be done. We need to understand better how to predict outcomes from obesity therapy.

Finally, what I'd like to use now as the second part of my talk to you today is this aspect of prevention. Notice this is the research agenda. There are many other areas but we need to understand better how to go about preventive strategies that relate to the individual, the local culture, and the society as a whole.

So in prevention, what comes to mind? Well first the

maternal, fetal unit. It's clear that women that gain too little weight during pregnancy or too much weight during pregnancy tend to have offspring at low body weights or excessive body weights. With those extremes in weights predicting more likely obesity as adults to follow.

Early childhood experiences clearly relate to obesity as an adult. Cutting back, so in terms of early childhood, cutting back on early infant feeding is probably important. Breastfeeding, very important. It seems like one of the best predictors of being thinner as an adult is having been breastfed as an infant. The adolescent period particularly times a susceptibility to excess body fat gain.

Early adult years, it's interesting, many kids go away to college. They get back after that first year, they're 15 pounds heavier. They're less active. They have access to energy-dense foods. They are studying more, at least they're supposed to be and anyway, that weight gain is not an unusual phenomenon in the first or second year of college. Midlife and then notice I don't put in the elderly years because it's interesting, body weight tends to plateau at around 55. Body composition continues to change and that even though your weight is stable on the average for a population at 55, you now have more adipose tissue and less lean mass. So that's another issue related to obesity that's not simply captured by the body weight or the BMI.

But now, let's think about the role of the individual. Each one of us has a role to play in our own weight regulation. Remember, we're thinking prevention. If you're obese today, preventing additional weight gain really is a message put out by the U.S.D.A. and the American Heart Association. Sure, we'd like you to lose weight for your health but how about preventing further weight gain and allowing the scale, five years from now, to say the same thing it does today.

Parents or a single parent has an important role particularly during early childhood and adolescence in terms of predicting a better protection from adult obesity. Health care professionals is a topic I thought a lot about and this is a print of the article published. It related to my President's address at the American Heart Association.

Now I'm an endocrinologist and you wonder how an endocrinologist becomes President of the American Heart Association. Because the AHA recognized more recently the importance of obesity to heart disease and I'm kind of a lifestyle scientist. I study nutrition, to a lesser extent, physical activity and the importance of maintaining a healthy body weight. Ultimately, I think, the AHA felt that they needed a dose of prevention. So I was fortunate and privileged enough to serve for a year as President of the AHA.

In my Presidential address, I pointed out the importance of getting physicians more involved in the care of

their patients in terms of their ability to assess lifestyle on patient questioning. The idea here is the three-minute physician interview and just parenthetically, I happen to be privileged now to serve and Chair the Lifestyle Committee for the new government guidelines for heart disease prevention and this three-minute interview may hopefully one day be part of every physician's practice. If we think of quality care reimbursement, a physician's ability to get necessary information from patients about their lifestyle may be part of their reimbursement. That's a hypothesis and a hope but maybe not ever to come to be.

In every patient I see, I ask a series of questions including how many servings of fruits and vegetables do you eat a day? How many servings of whole grains a day? How many servings of fish weekly? Do you read food labels and what about saturated and trans-fat content? What are your snack foods and desserts? What's your maximum weight? What's your food-intake pattern meal or are you a stress eater? Are you hungry when you eat? What's your weight loss experience and how much weight would you like to lose if you could lose weight?

Then on the physical activity side, what's your activity in the job place? Do you use the elevator, escalators, or do you use the steps? What's your planned activity, type and frequency? Parking habits, close or far? What are limitations that you experience in terms of physical activity and would you

like to increase your physical activity?

Now you may skeptically say Eckel, how can you do that in three minutes? It's hard but you don't ask all the questions to every patient but it gives the patient an idea that you care about their lifestyle and how it relates to chronic disease and their ultimate health risk.

Now health care professionals is another area where, in fact, I just mentioned we need greater impact but through organizations too is an opportunity for us to really further the cause of obesity prevention and more effective therapy. Now, as Jim mentioned, children is where the big concern is. If we want to prevent obesity and we have a three-fold increase prevalence of obesity in childhood, we got to start at an earlier age. That again begins during pregnancy I think but subsequently we've got to think of ways to modify the environments so children can grow up a healthy body weight and sustain that over their entire life.

I'm not sure this is true but somebody said that this is the first generation where children will die before their parents. That's a fairly dramatic statement and in terms of being at the DNC or the RNC next week, those are the kinds of statements you hear frequently and will be quoted in newspapers but nevertheless, this in fact may be true but we certainly hope not.

Now when I was, again, had the privilege of serving as

President of the American Heart Association, the AHA and the Clinton Foundation joined together in an alliance and this was not simply the former President Clinton but in fact, Mike Huckabee who, at that time, was the governor of the state of Arkansas was involved in this alliance. So the idea here was to really focus the efforts between the AHA, the Clinton Foundation, and also at a state level to reduce the incidence and prevalence of childhood obesity.

When the President was approached by the American Heart Association shortly after his heart disease had been diagnosed, we gave him a few months to let him recover but after the AHA went to the President, he felt that the most important health-related issue the AHA had on their agenda was obesity and his desire was to focus then on childhood obesity. So let's look briefly at this alliance.

The alliance includes four components, kids, industry, schools, and health care. Now for the kids emphasis, this is aiming to make healthier lifestyles quote cool, unquote for tweens and teens and ultimately, there's been a tremendous effort put forth by Nickelodeon to have all kinds of free health-related advertising on their channels. They've now committed over \$30 million to this campaign and also part of this program to introduce new programs such as the Youth Advisory Board, the Healthy Living Program, and the Youth Mobilization Trainings. I should point out there's almost a

million kids now that have signed up for the program called Go Healthy, which is promoted largely on Nickelodeon.

So kids can really get involved this month particularly because September is Go Healthy month where they're going to celebrate healthy eating and physical activity by positioning young people as viable solutions to ending this problem. There's also a new interactive, online program where kids can get engaged and really do the kind of thing they like to do and have that focus around a healthy lifestyle.

So here's what the activities for September are going to look like. Week one's going to be a media briefing on the science of childhood obesity followed by some online viral promotions and then kids are going to host forums in six different marketplaces and finally, they're going to have a Go Healthy celebration events gathering such as the one shown here where kids who have a healthy lifestyle promote that among their friends and peers.

The school piece really relates to a program largely supported by the Robert Wood Johnson Foundation, now having given over \$40 million of support to this program. This promotes a healthier school environment with better school nutrition programs and also more active physical activity engagement both in gymnasium and before and after school.

The industry piece, I think, is well represented by the American Beverage Association Agreement with schools. I was

surprised to find out that over 90-percent of vending machines in public and private schools are supported by the American Beverage Association. So when they changed the number of calories in beverages and limited the types of beverages that kids had access to, this was a major step in the right direction.

Then finally, the health care initiative really is going to be looking at convening insurers and employers and providers to really find ways ultimately to fund obesity evaluation and treatment and this is going to be tough act. I've been somewhat more active in this arm of the alliance than others and we really have a lot of work to do but it relates, to some extent, to what you're all here about over the next few days in terms of what Senator Obama's platform is going to be in terms of health care reform.

So past organizations, is the role of industry and I've alluded to that briefly in my presentation and finally, the role of government. Again, that's why you're here. That's what we're here to discuss and we're there to kind of further the cause of acceptance of obesity is a significant health problem and how to modify its prevalence and disease-related complications.

So let me end that lifestyle can be successful long-term. Rick Reilly who used to write the editorials for Sports Illustrated, in fact, lives in Denver. I think he still does

but Rick's no longer with Sports Illustrated but on a plane to the East Coast a couple of years ago, I really fancied about this particular editorial. So what Rick here is describing is jumping Jack LaLanne. At 89, he's got a 46-inch chest, a 31-inch waist, and he could do 100 push-ups without turning so much as light pink. Then they revealed his typical diet, which is basically egg whites, fruits, whole grains, and of course, a glass of wine a day. So I'll stop there and thank you very much for your attention [applause].

SALLY SQUIRES: Well and just to pick up from that, I got to interview Jack LaLanne and I'm happy to say that I interviewed him about a year ago and actually did some videos with him. He is now a robust 93. He is doing all those same things including he's now a pitch man for a pool that is like a lap pool that you can swim in in your backyard. He still promotes juicers, which because he really does believe that fruit and vegetables should be key.

As a matter of fact, if man didn't make it, don't eat it is, or I'm sorry, if God didn't make it, don't eat it I think is what he says. He still lifts weights. He swims every day. His wife, Lala LaLanne, who is a delight and he are involved in a radio show and he's evidence that if you choose the right parents and you do the right things in life, you can really have a wonderful and healthy existence.

With that, we have Morgan Downey. Morgan Downey is such

a terrific fellow to kind of wrap this all up and tell us where we need to go in Washington. I can't think of anybody better. I've know Morgan for a number of years. He's been a real leader in this field of obesity and in getting obesity covered in medically, the way it should be just like many, many other medical conditions. So I would like to welcome Morgan.

MORGAN DOWNEY: Thank you [applause]. It gets very refreshing to actually be in the audience for some of the earlier presentations because I just keep finding people like Gary and Jim and Bob so excited, so stimulating, and so invigorating about the challenges that we have and what we have to work on.

So I've been, my niche in this are started about ten years ago when a couple of other past Presidents of what was then called NASO, now the Obesity Society, wanted to create an advocacy organization in Washington and I had many years of experience in doing health care lobbying and advocacy work in different areas. So we got together about ten years ago and it's a fascinating evolution. At that time, I was talking to a very high-ranking member of the Clinton administration about what we wanted to do in terms of public policy solutions to obesity and she was like there are no public policy solutions to obesity though.

Politics and government really don't have anything to play. This is all a matter of personal choice and personal

responsibility. Then the last year at our conference in Washington at G.W., representing John Edwards' campaign was his campaign manager Congressman David Bonyer and he related that when he was in Congress and going to run for governor of Michigan, which I think was probably in the early 90s, he thought what a great issue to bring up in his campaign to talk to voters in Michigan about the problems of overweight and obesity that he was aware of at that point, felt relatively early point in the process, and his advisors, his media people and consultants were like don't go there. Don't go there. People are too sensitive. You're going to make people feel uncomfortable. People don't want to be reminded about their own weight and leave it alone. So he moved on to some other issues.

So even getting to the point where we can now talk about it in a way that we're more comfortable about it, it's less awkward for people to talk about it, it's still there obviously and this is a big problem with physicians and dieticians counseling people about it because of its sensitivity but I think we're definitely moving in the policy area where the recognition of the impact of obesity is just forcing us to confront it more.

So when you step back from the data and all that we just went through and you look at well how do governments and here I'm particularly talking about the federal government and in our next panel, we're going to hear a lot more about what's

happening at the state and local level, how does our government, our democracy respond to serious health problems and it's always some kind of combination of these factors, education, research, prevention, treatment, in some areas consumer protection, some areas where there's a lot of discrimination and stigma. I think you can kind of plot out for almost any condition, whether it's heart disease or HIV/AIDS or avian flu or autism, some kind of combination here of strategies that we have to pursue.

One of the interesting things about dealing with obesity in the public policy arena that's very different from other areas is that everyone you talk to is a study of one and their control group is their spouse, their sibling, their parents, their aunts or uncles, but it's not like talking to someone about Alzheimer's or Parkinson's where in front an expert who understands the workings of the brain, you're going to be kind of humbled. Everyone has their own experiences. Everyone has their own perception about what the problem is and usually what the cause needs to be.

In this regard, we can look at how policy makers have responded and how they might go ahead and respond to obesity. I would say a major part of the governments' investment in the last decade or so has really been on the education side. The Healthy People Program, which is the agenda for the public health service comes out every ten years. that has had a very

strong component dealing with overweight and obesity. The food pyramid that the Department of Agriculture and HHS developed, I think about every ten years, also has kind of refocused on it.

A Surgeon General report that came out in 2001, I think, was very influential in terms of getting public and health professional attention on obesity and really kind of encapsulated all of the problems and issues that we've seen and various federal agencies like the Department of Agriculture, the CDC and NIH all have some components, it may be a website or it may be something more active. It may be brochures. It may be various materials that try to kind of educate people, particularly their constituencies, and in the brochure for this conference in the back in the resources are many of the websites that these folks use.

Then there's the Food Labeling and Nutrition Education Act, which has been a controversial area in terms of labeling for calories and as well as other information for better nutritional habits.

Research is obviously key to dealing with any health problem particularly one that's as serious and complicated as this. As our speakers mentioned, we've had this façade of simplicity about obesity that it's so easy for people if they really want to, they can really lose weight. So what do we have to know? What more do we need to know then to tell people to eat better and exercise more?

You find that at surprisingly high levels of government and research where they should know better but there's been this wall of simple explanation for a complex problem but we have two institutes in particular although several institutes at NIH is composed of about 29 research institutes and centers, many have some portfolio relating to obesity. The Diabetes Institute and the Heart, Lung, and Blood Institute are major players but others such as the Cancer Institute are also involved.

A few years ago, NIH undertook a more systematic approach to developing a strategic plan on obesity research. They have this website that's mentioned here, directs researchers to various funding opportunities and lays out a nice format and template for expanding research on obesity but there's no money attached to it. Obesity researchers are in the same pool as every other researcher in different areas.

This is a little bit out of date but the trend lines haven't changed appreciably. The total NIH budget is really more of a flat line now and has been for a few years. you can see that as relative to the overall budget for NIH, obesity research is a very small component of that.

This is another way of looking at the data in terms of NIH funding. Again, it's a little out of date but I don't think, since the system has been flat for a few years, nothing much has changed but you can see that there's a number of very

important and critical diseases to address but which get significantly greater research funding.

I should just say for anyone here from NIH, we understand how these beans get counted and which pot they're in and how they're structured, has their fine points. NIH is going to a new system to analyze just what amount of funding they're really putting into different diseases. It's always kind of one of those inside the Beltway quandaries as to how do you count this as diabetes? Do you count it as obesity, et cetera? I think this is really kind of a good narrative that compared to other diseases of comparable importance to us; obesity gets a very small part of the pie.

This is just another way of looking in terms of the population. I don't think anyone's proposing that Congress appropriate money to NIH just on a population basis but it shows, I think, that obesity as a focal point, has been of really recent understanding to the extent that the funding patterns have been set at an institution like NIH over 30, 40 years, it's very hard to kind of find new dollars or room for relatively recent conditions as obesity is to kind of get jumpstarted and to get more research support. This is obviously something that's very important to the obesity society to improve this picture.

Prevention, of course, is something that everyone in the field is very committed to. This is now, I think, CDC funds

about 22 or 23 state programs where they develop state plans to deal with obesity. The Robert Wood Johnson programs have already been mentioned.

Treatment has been somewhat of the orphan child when it comes to obesity policy making but the policy makers and public are very, very comfortable talking about childhood obesity. We're obviously very concerned and people are very sympathetic about issues relating to children. A lot of people in different capacities see the differences there. I was, one time, on a radio talk show. It was kind of a more of a right-leaning talk show and was kind of getting chewed out about pushing obesity issues.

Then the caller revealed that he was a Boy Scout leader and was just amazed that 20 years ago, he'd take out a pack of or den, whatever it is, of boy scouts on a 15-20 mile hike. Now he said they have to rest when they leave the parking lot and was just amazed at the decrease in physical resources and the increases in weight that they had.

Treatment and treatment for adults in particular are the orphan child of obesity policy making in Washington. There's not a lot of sympathy for overweight adults and even though as Dr. Eckel said, there's very good data that's evolved in the last few years about the effects of surgery and surgery outcomes appear to be improving quite a bit. It's still a very high wall of resistance to kind of go that path.

The Food and Drug Administration has what's called guidances for drug developers, drug companies in which they lay out standards on which they will evaluate products that come in to the FDA for approval, drugs that come in. The industry is still working off of draft guidances from 1996. We've had several efforts to get FDA to modernize those and they're still considering them.

Medicare has gone through a process culminating in 2004 with an expansion of coverage for bariatric surgery but there are no drugs. Drugs for treating obesity were excluded from Medicare Part D and have not been able to find any way of redoing that except going back through Congress. There's no coverage in Medicare for physician counseling of overweight, obese patients, and nor for dieticians to also counsel on weight-related issues.

Medicaid coverage is fairly similar to this where there is any kind of coverage for services. It tends to be very limited in duration, in scope. If there's drugs provided, it's usually for a short-term basis, which the clinicians appreciate is not going to be adequate to create a significant weight loss or long-term changes. There's frequently, for surgery, very extensive presurgical requirements, sometimes putting off surgery for a year or more while people have to engage in documented other modalities of weight loss. Even when you get through that, the payment rates are usually so low that most

surgeons avoid participating in the Medicaid program because they would have to kind of charge at a similar level.

Private insurance is interesting. It's actually, I think, getting a little brighter. I used to describe, I'm not sure I have it here, I guess not, the five stages of obesity, which were like the five stages of dying, ignorance and denial and anger and the insurance companies have all gone through those stages but now, I think, we're seeing inside Washington in the health care industry, there's really kind of more a seriousness, I think, that is saying we understand the problem. We know we have a role but what do we pay for? How can we be sure that the outcomes are going to produce the kind of sustainable changes that we want?

Although I think the economists see the overall cost picture, which is very important, inside the health insurance world, there's this bifurcation that the private insurance market gets kind of the 30, 40, 50-year olds where the diabetes may be latent, the cardiovascular diseases are latent. Those come in like gangbusters in Medicare after age 65.

So the insurers say well we could cover this but I'm not going to see any benefits of that on my expenditure side. I'm not going to see any improvement next year or in five years because either the individuals move on to another health plan or they'll eventually go into Medicare and Medicaid and they're off my books.

So we have to find a way to kind of, I think there's a role there for the federal government and Medicare to really do more to encourage private insurance to change that and to make it more attractive to cover obesity costs before they really get dumped in the Medicare program.

As Gary mentioned, discrimination is a very, very important issue. It really is kind of the substrata of everything that goes on in obesity and everything that we want to go on when it relates to obesity. The prevailing view has been and law has been written as such that obesity is not considered in itself a disabling impairment. There's some various laws and regulations that don't regard it as a disease.

Sometimes there are cases where a person has morbid obesity and has and in fact a very highly documented evidence about the restrictions on their major life activities and might be able to get some recourse usually after very involved processes with EEOC or in various other forms of remedying job discrimination but we know it's very prevalent.

It's very hard to kind of get good strategies around it but it's an area that we found with some of the researchers who have looked at this, to Gary's point earlier, some of the researchers who have looked at job discrimination have said that when they go in and they look for discrimination against minorities or against women, employers who do that have very elaborate mechanisms that basically disguise what they're doing

but when it comes to weight issues, they're very upfront. They're like we're never going to put a fat person in the front office. We're never going to promote someone who is obese to this or that level, have them deal with clients for example.

There's even an interesting book by someone some of you here for the convention may know, a very prominent Democratic lobbyist, Mike Berman, wrote this book called Living Large. He's a very powerful, very influential Democratic lawyer lobbyist in Washington and has struggled with weight issues all of his life.

The book is very powerful, very sensitive but even he was told at law firms in the beginning of his career that they would not have him working with clients and obviously if you're not working with clients, your career in law firms are pretty limited to the research shop. So even people like that who have really highly skilled, high-developed experiences and status experience this continuing discrimination.

Then consumer protection is very important in the weight loss area. We all have seen and clicked through hundreds and hundreds of infomercials for various products and the like. The best data we have out of consumer surveys is that many consumers feel that if it's being advertised, it must be okay, it must be approved by the government somewhere.

In fact, there's huge loopholes for these products. they really kind of set a tone, I think, with consumers that

there ought to be that one magic bullet that some pill I can take or some device I can use and I will get, my weight will be under control. it all fills into that mythology that there's a simple clean answer to a very complicated problem.

Frankly the Federal Trade Commission and the FDA people would say they could spend their entire enforcement budget just on fraudulent weight loss products and not do anything else. It's that prevalent.

This is just a slide from an article not too long ago in JAMA and what we're seeing here, these kinds of articles really didn't exist ten years ago but we're seeing researchers and policy-oriented people at different institutions collaborating trying to look through, okay if we change vending machines, if we change the school lunch program, if we raise taxes on foods with certain quantities, what happens? Do agricultural subsidies have an effect on our diet and ultimately our weight? So this is really relatively new that I think this kind of sophistication has come to our activities.

Finally, I wanted to just kind of congratulate the Democratic Party. This convention, when they adopt the platform, this will be the first national party that has even referenced obesity in its platform. I just want to spend a second on that because we're very proud that that's taken place.

We hope that the Republicans follow likewise next week

but there's an interesting disconnect in a lot of the political discussions about health care and health care reform and that is that 99-percent of discussion comes about in terms of health insurance and cost of insurance, cost of health care and very little about making the population healthier.

So when we had our conference last year and had these very well versed policy makers who were advising the major campaigns, it was clear that if you're in favor of universal health coverage, single payer, the current non-system we have, just leaving it open to the private market, none of those solutions about who pays is likely to have an impact on certainly the obesity epidemic or resolving some of these issues.

So I'm very glad because I think it's a step to having the conversation about obesity policy change from just about who pays to how do we make people healthier in this country. That may come through some insurance mechanisms but it will almost certainly come through a variety of mechanisms. So thank you very much and I'll be glad to turn it back to Sally for panel discussion [applause].

SALLY SQUIRES: Thank you very much Morgan and we want to make this a conversation with you. So we want to open this up and have our panelists join us up here. One of the things I think I was looking at the Go Healthy month that one of the speakers talked about and I got to participate a year or so ago

in Arizona on a virtual school bus where all the kids were walking together.

We noticed, coming in here today, that there was a young student who had his backpack on and he was on skates and he was skating to school and it was really refreshing to see. Then earlier this year, of course, we had Eli Manning who worked with the President's Council on Physical Fitness and Sports and did the first national effort to try to get more people moving. So there are things in place but certainly did learn from the Lean Plate Club that these small changes really can add up to big rewards.

So I don't know if we want to raise the lights a little bit maybe so we can see all of you. I should also tell you that the Kaiser Family Foundation is recording this and is going to do a web cast so that this will be available for people who can't join us today. There will be an opportunity to see what has been presented. I believe we have a microphone, is that correct, for questions? Yes?

STEPHANIE RIGGS: My name is Stephanie Riggs [misspelled?] and I'm friends with Dr. Eckel and Dr. Hill and thank you very much for all that you're doing. I'm curious to know if these rates continue with the children, what will this do to Baby Boomers trying to get routine hospital visits and that kind of thing? What will this do to hospitals in the American health care system if these rates continue when you

have seven, eight, nine-year old children who are obese right now?

SALLY SQUIRES: Who would like to?

ROBERT ECKEL, M.D.: I think we don't want to think about it [laughter].

STEPHANIE RIGGS: I mean could it snap the American health care system?

ROBERT ECKEL, M.D.: Oh sure. I don't think there's much, I mean when you look now at contribution of obesity to health care costs, the population that's being measured there is really a much older population where obesity has been established.

As Jim mentioned, the paradigm used to be that when people entered young adulthood or so and we're kind of leaving the strictures of home, that kind of incremental increase in one or two pounds a year, ten pounds a decade, catches up with you in your 40s and 50s. So now if you telescope that model down to 10-year olds, you're catching up with another decade or two of obesity setting up all of these other conditions.

Some of the researchers are looking at it to see whether there may be kind of two effects. One is whether conditions like diabetes would occur sooner in a younger population or be more difficult to treat maybe more complicated but I don't think there's many folks who don't feel that the implications for this as a younger and younger population with

these conditions, that used to be really of old age, is going to be an enormous strain on the health care system.

SALLY SQUIRES: Dr. Hill, you look like you had something to add.

JAMES HILL, PH.D.: Yes. I think the great example there is if you look at type II diabetes. So type II diabetes is a disease that kids didn't ever get before until recent generations. So you're asking the question of if a child develops type II diabetes at age 13, and that's happening, what's the health care cost going to be for that individual? You know what? We have no idea but I think everybody is projecting that it could be very, very scary.

STEPHANIE RIGGS: Also you want to treat a childhood type II diabetes?

[END RECORDING]