

“Health Inequities in China: The Frontier Challenge for the 21st Century” Panel Discussion. November 15, 2006. New York.

Transcript

John Coleman: Good Afternoon. My name is John Coleman. I am not a doctor. I am not in the field of Medicine. I am an investor who is extremely interested in China and Asia. I would like to thank you for allowing me to say a few words. I want to welcome you to the Asia Society, and thank you for joining us to inaugurate a second of a new series of programs on global health. I originally became involved in it maybe two years ago with Harvard Medical School, and I had just returned from China visiting what I call a co-venture cooperative program between Peking University Harvard Medical School and Mass General Hospital. The initial program is primarily in the area of cardiovascular disease. Last week I hosted a dinner with Vishaka Desai--the president of this great organization--for members of the staff from Mass General and the faculty of Harvard Medical School who have initiated this program in China. Visiting Peking University was one of the most phenomenal experiences I have ever had. Over the past year I have become more involved with the Asia Society, although I was a member for many years. I have a son studying for seven months in China, furthering his language expertise in Chinese language. The Asia Society is a platform for building the bridge with the developing nations in Asia and a form for giving back to a country rather than investors just taking money out and running. The most important element is the lack of health care, private pay insurance, and government pay insurance. It is not only mandatory for the well-being of the population, but also is a great impetus for the burgeoning economy in China. The individual in China today has to save so much money for precautionary basis. Saving so much for a rainy day when they do not have anything—even with a poor system that we have—they have nothing. They have nothing. The government owns the major tobacco industry. If they just gave back the profits from the tobacco industry, they could certainly support a wide spread health program. The program at the Asia Society is an example of the Asia Society's commitment to building on that work to look at the broader challenges of healthcare and health infrastructure in the region. Recently, Novartis announced the opening of an R&D facility in China. The Harvard Medical School is not only doing it through Mass General Hospital, but they are also doing through the School of Public Health. There is a optimism that Health Care and the focus on Health Care is beginning to take off. At a time when China is paving the way with economic growth, foreign investment, international diplomacy, and even its policy on HIV/AIDS, again it is failing to address most of the pressing issues in its domestic agenda. We have some wonderful experts in the room, so I want to end here. I would like to introduce Dr. Jorge Plente, Pfizer's Vice President for Asia and Japan Medical Affairs.

Dr. Jorge Plente: Thank you very much. It is a real honor for us and a privilege on behalf of Pfizer to be involved in this kind of event. Welcome. The discussion I think is going to be extraordinary, so I am not going to take much time; that would take away from the time that the speakers have. I would like to ask the speakers to come up to the podium. I would also like to introduce the person who is going to moderate the discussion who is a extraordinary individual. You read her CV—it is a who's who dream come true.

He is a medically oriented individual, training at Stanford, John's Hopkins, and Cornell. I had the privilege of meeting her while living in Beijing. She was the correspondent for the *New York Times*. It is very interesting how small the world is. I saw her today, and I said, "wow, I know this lady." Living in Beijing at that time was very interesting, and I will share a couple of stories with you. But what Mr. Coleman said is incredible. It is extraordinary what is happening in China. My wife is a physician trained in the United States. When we moved to China, she got her medical license. She worked in a local hospital and began to develop emergency programs. She became very involved in emergency care of the Chinese population. Her comments were that essentially there was none. The experiences that we had were very unique. What we have now is a very interesting discussion on a topic that will have significant repercussions in the future. Last September in Tokyo I gave a keynote speech for the world medical association. And they asked me to talk about the status of the medical profession in the West. I focused primarily on what I perceived as the crisis in the United States of primary care. There was a recently an article in the *New England Journal of Medicine* in July of this year, showing that the primary care physicians in residency programs are not being filled. Close to 3,000 positions are available every year, and only 1,000 are being filled. Most of them feel that primary care is the backbone of good preventive care. So we felt that this was as significant crisis here in America. That really pales in comparison in what is very likely going to happen in China, where you have 700 million rural peasant population pretty much marginalized from healthcare. I recently read that the per capita income of this population was 1900 Yuan per a year which is close to \$250 a year. It is impossible to pay for any kind of quality health care with that amount of money. The insurance program that has been piloted in China allows peasants to pay 10 Yuan a year, and the government would contribute 40 Yuan a year, which comes to around \$55. Those are the amounts of money that you are looking at. There is a story in the *China Daily* about a farmer who was charged \$1,200 for his father's three hospitalizations. How are you going to pay this kind of cost with \$50 a year? I hope that during the discussion today that some of these issues are brought up. I hope to do it again multiple times in the future with topics with equal or similar relevance. I want to thank everybody. I would like to thank the speakers for taking the time to travel here. Elisabeth, I would like to thank you for coming all the way from Europe to moderate this session.

Elisabeth Rosenthal: I am Elisabeth Rosenthal. I am health reporter with the *International Herald Tribune* and the *New York Times*, based in Europe. I have a long interest in China, having been one the Beijing reporters for the *New York Times* until a few years ago. I first just want to introduce our panel members, and then we will go into a general discussion. We will give them a few minutes each to talk about their particular interests in the subject. We are lucky in that they come at this from different angles. Dr. Frank Hu is a professor at Harvard School of Public Health and Harvard Medical School. Although he is based in Boston, he does a lot of his field work in China, focusing on diseases of what you might call the developed or modern world: diabetes, heart disease, and obesity. He will talk a little bit about that aspect of the China health issue. On my right is Bates Gill, who is the Freeman Chair in China Studies at the Center for Strategic and International Studies. He is an expert in the political systems and politics, and how in this context how they relate to the health system in China. We first met in Beijing during

SARS. He has gone on to do a lot of work in looking at political systems in China and how they relate to the health problems they are having now. To the far right is Doctor Lincoln Chen, who is the chairman of the China Medical Board, and previously the executive vice president of the Rockefeller Foundation and head of the global equity initiative for healthcare. He is obviously interested in the inequities of the healthcare system in China--the haves and the have nots, and how people fall on one side of the equation or the other. I have to say from my perspective this has always been fascinating because as a reporter, China in every field is a country of extremes, but I think no where more so than the field of health. In my time in Beijing, which ended in 2003, you could go to the fanciest clinic I have ever seen on earth and get laser eye correction. 30 miles outside of Beijing or 20 miles outside the city, you can find kids with juvenile cataracts who could not get them removed. The extremes were so impressive. In our own office in Beijing, our office manager had a grandfather who was in rural Hunan, and the grandfather had a brain tumor and couldn't get it taken care of because the family couldn't collect enough money to even get him through the door of the hospital to start the process in motion. Even when they did get money, his attitude was that he was not going to bankrupt his family just to take care of a brain tumor that he will probably die of anyway. Over and over again as I was out and about in China doing stories, I would write a story and the question would always be the same, and then I would get letters afterwards, saying we are collecting money for surgery, "can you help?" That was kind of the process. You first have a symptom, you may be getting diagnosis, and then the big effort was, 100 here, 500 there, going to families and friends to pull together funding, which was an insurmountable barrier for almost everyone. This happens in a country where all of these wonderful machines and techniques and surgeons and knowledge exist. So I am interested in what everyone has to say. I thought maybe we would start with each of our speakers saying a few minutes about their particular interests. Then we will go into a kind of general discussion

Frank Hu: I grew up in China in Mu Han. I was trained in internal medicine. Fifteen years ago I came to the states and got my Ph.D. Now I am a faculty member at Harvard School of Public Health. Most of my work was to spend several weeks in China especially in Wu Han and Shanghai, studying metabolic diseases and cardiovascular diseases. I want to start by mentioning three transitions in China. The first one is the economic transition. Everyone knows what is going on there. The economy has dramatically improved in the past several decades. That has led to two other transitions. One is a nutritional transition, which means a transition from malnutrition to over nutrition. That is what is happening especially in urban cities. The second transition is the so-called epidemiological transition—meaning the leading cause of diseases—the transition from infectious disease and malnutrition to chronic diseases and modern diseases such as diabetes, cardiovascular disease, and cancer. In both rural and urban areas those diseases—especially heart disease, stroke, and cancer—have become the leading cause of death, even in remote rural areas. So the transitions have been very dramatic. I remember when I was a physician there. That was almost twenty years ago. There was basically no diabetes. I don't remember seeing any patients with diabetes. Most people had infectious diseases and malnutrition. But now diabetes is very common, especially in the city hospitals. So the transition has been very dramatic. We know that those transitions will

have important ramifications for the health care system because those diseases--especially cardiovascular and cancer--are very expensive diseases. There is no cure for those diseases, and that creates a huge burden for the Chinese healthcare system. I just want to give you a few statistics. I think those statistics are very startling in terms of overweight and obesity. Right now the prevalence of overweight in overall China is about 25 percent. That includes urban and rural area. Obesity—which is defined as BMI 28 or higher—is about 10 percent. This prevalence is much higher in the big cities. In terms of hypertension, right now about 20 percent of adults in China have hypertension, much higher in the northern part of China as opposed to the southern part of China. In terms of the actual number, 160 million people now suffer from hypertension. Diabetes has increased dramatically. At this point, 20 million people have type 2 diabetes. In terms of high cholesterol, the prevalence is also about 20 percent. 160 million have high cholesterol. That is a huge number. The problem is that most people are not aware of these conditions, and they don't get treatment for these conditions. Even if they get treatment, they don't get high quality treatment to control these conditions. In terms of cardiovascular disease, we did a survey recently in Beijing of cardio-metabolic syndrome in China, which is a clustering of hypertension, high cholesterol, diabetes, and obesity. We found that the prevalence of cardio metabolic syndrome is almost 35 percent. One third of the participants that we surveyed had this cardio metabolic syndrome. Most of them would go on to develop cardiovascular disease. These numbers are not very different from the U.S. prevalence. This is very alarming. So I think these problems will continue to increase and will certainly create a huge burden for the Chinese healthcare system.

Elisabeth Rosenthal: Mr. Gill, would you like to address how this relates to your work in political science?

Bates Gill: Thank you. I am an outsider in this panel. I am the only one up here that has no association with the Harvard Medical School, unlike my three fellow panelists. I come to this issue as a social scientist and as a student of China's politics and foreign policy for more than twenty five years. It has been a very interesting experience trying to dig in to these questions and how they do have political and social ramifications. I guess what has happened over the last four or five years, first through an interest in the HIV/AIDS challenge in China and now more broadly on questions of public health, I have tried to generate greater interest and greater profile for this issue, especially inside the beltway in Washington as an area that our government as well as our policy community more broadly ought to be interested in. This is led me to travel all over China, working with philanthropic as well as corporate and non-profit organizations, trying to educate myself about the problem but as well try to help organizations with significant resources to understand China better and to more effectively apply their resources to try and help China deal with this burgeoning healthcare crisis. I am drawn to this really for two principle reasons: one is what it tells us about China. It is a fascinating lens through which the healthcare issues in China to try and understand the dynamism and the remarkable changes which are unfolding in that country today. It tells us a lot about income disparities. It helps us understand the role for example of non-governmental organizations and civil society organizations and how they might contribute to helping

the leadership deal with this increasing problem of public health. It is also an interesting story about the relationship between the public and private sectors in China. As China goes relentlessly towards the market, it clearly has these major downsides to it. How is the leadership going to try and balance the obvious need for more marketization, in some cases, against the need to return to some more socialized understandings of the delivery of public goods? It is an interesting area also to follow how will the Chinese leaders choose to adopt what might be called Western models of reform in certain areas, for example in the area of healthcare insurance, or not. Instead, try to develop uniquely or special Chinese approach to these kinds of problems. It is a fascinating gateway into a lot of much bigger and interesting questions that are going on in this fascinating place. The other big reason I am drawn to this because I think it is an area of enormous potential for U.S. China cooperation, both in the public and private sectors as well as in the public private relationships. It is an area that is not as sensitive. It is one where China clearly needs some help, where there is greater openness, I think, on the part of Chinese authorities to engage with outsiders. There is a long history of cooperation between the foreigners and Chinese in the improvement of China's public health. I think so far unfortunately, it has been relatively underserved, at least speaking from a Washington DC perspective. I am pleased to see that our health secretary is going over there in the first part of December. I think we will see a rapid expansion across a lot of issue areas of public health, and a lot more can be done.

Lincoln Chen: Hi, name and appearance notwithstanding, I come to the China health scene fresh from two different perspectives. First is that I spent fifteen years living in Bangladesh, India. Secondly, I just started a job at the China Medical Board, which for 100 years with John D. Rockefeller Senior's money is a private foundation that had dreams about China. So what I wanted to comment about very quickly is the origin of that dream, but more focus on the current dilemmas that the board faces. The origin of the dream in 1914 was to take this wealth, and—like the Gates Foundation—transform modern medicine and medical education in China by building the Peking Union Medical College, truly I think one of the more spectacular philanthropic endeavors of the 20th century. China of course also had the wonderful benefit doctor universal healthcare system. I think that is where the China Medical Board has brought me in as president—to figure out what is next. What is next is very much what Jorge and Elisabeth had opened with, which is that health care and health in China is literally in an equity crisis. The precipitous collapse of the system for particularly the rural poor and frankly even the urban privilege is because the person getting that lazar surgery probably doesn't need it. It is being commercially driven. So you now have China, according to the world health report, which ranks 180 out of 190 in terms of the fairness of its health financing systems. With all of that gloomy news I should say that the Chinese leadership is well aware of this. I was in a conference in Beijing just three weeks ago where this was discussed. I think a major new initiative is coming. Politically I think the reasons for that awareness and what they do is critical to how they will address this. Part of the awareness interest is because the current leadership come from rural areas and know what it is like to be dirt poor out there. They are worried about political instability with the inequalities, particularly the flood of rural poor sick people coming into the urban centers. There is a massive political attack from the new left on what has happened with the

commercialization due to the social structures like health care. So I will close by saying that the rural situation, the western regions, public health and prevention are in very bad shape in China. Society is very urban biased. I have been to China three times in the last four months, and it took my third trip to get to a rural village. I couldn't get out because of my hosts capturing me in the cities. It is very difficult to get out. But I will close by saying I was having a little back pain, and my host said I needed immediate medical attention. I went right into the ground floor of Peking Union Medical College--which Rockefeller founded 100 years ago. There is no standing space at 6:30 in the morning because there is no primary or secondary. Everybody comes in carrying cash. I was taken immediately to a cat scan, and of course two professors came in and read my cat scan. I think I am all right. But you can see the high tech medicine working in the urban areas, and there is no primary or preventative system to speak of.

Elisabeth Rosenthal: Thank you. I am going to ask questions and get some discussion going here, which I think will be easy. In about fifteen or twenty minutes we will open the floor to questions. The one thing I think we all thought of traditionally as being wonderful about China is this system of bare foot doctors and the primary care and the vaccination records. So the question is what happened to it? Was it real or was it a myth anyway?

Frank Hu: I grew up in that era. I was taken care of by bare foot doctors. It was a wonderful experience. Everyone was poor. There were no high tech hospitals, but those doctors mostly graduated from junior high schools. They got very brief training how to do vaccination, how to do acupuncture, and they come to the villages regularly to vaccinate the children and take care of minor needs. Everything is free at that time. In the beginning of the 1980's with Deng Xiaoping came the rural area reform. The healthcare system completely collapsed because the farmers owned their own land and they did not have anything from the government anymore. You had to plant the seeds and harvest by yourself. For this reason, many of the barefoot doctors went back to farming because the family needed them. Also, they didn't make much money by giving vaccination or acupuncture. That is the time when this whole system collapsed. The question is, can this kind of system work in today's environment in the rural areas. I think it is going to be very difficult and much more complicated. Earlier everyone was poor at that time. The barefoot doctors were considered a very good profession. It was respected and admired by people. At that time there was not much choice. Now, many of the young people want to go to the cities, and they can have much better opportunities in the urban areas. So very few people want to stay there and do these kind of services for the village people, especially when they don't have much financial reason. This was a good system at that time, but I am not sure whether it would work in today's environment.

Elisabeth Rosenthal: Would you say that the average Chinese person is better off or worse off in terms of health.

Frank Hu: Well, for most people in the rural areas, they are worse off. 90 percent of the people don't have health insurance, so they have to pay a majority of the bills through their own pocket. The average income is very low so most of them cannot afford to buy

drugs to stay in the hospital. So I think certainly the transformation of the system has devastated a lot of people in rural areas. One exception is Tibet. It is ironic that the system is still in tact in Tibet. This is for political reasons. So the system still works in Tibet. The government subsidizes a lot of money to the Tibetans, and they have a much better health care system than most of the rural areas in China.

Elisabeth Rosenthal: Dr. Chen, you said you finally made it to a rural area. What was your impression?

Lincoln Chen: If Chinese statistics can be believed, the barefoot doctor system was quite revolutionary because China accelerated its health gains during that period enormously. On the other hand, I honestly believe there was an over romanization of the barefoot doctors, thinking that really they provided everything. I think that is very false. I think that technology was very low. The knowledge base was very weak. They resorted to traditional medicine in part not just because of culture but in part because of the lack of technology and economic base. I will conclude by saying that I don't think China can go back to the barefoot doctor. I think that is something of the past. I would love to have a historical workshop on the barefoot doctor period because I think it is quite mixed. Let me just add that the barefoot doctor model is a preventative model. I think by in large it worked: China doubled its life expectancy in a matter of forty years. That is a crude measurement I suppose, but I think it is quite a remarkable achievement. What probably needs to be done is to introduce a greater degree of curative capability, which they don't have because they are so undereducated. There is still the equivalent of barefoot doctors—at least in physical form at clinics in virtually every village of China. It is just that they are not doing it for free anymore. They can provide only a very basic level of preventative care. If you want to do more, you have to be prepared to pay for it, and you probably have to travel significant distances either to the township or to the county hospital.

Elisabeth Rosenthal: Dr. Chen, can I ask you, you said you were recently in a village. You have been in India, you've worked in a lot of parts of the world struggling with health issues. What did you see when you were in a rural village.

Lincoln Chen: You have to remember, I went to the village where I was born. I was a Diaspora distinguished guest. It was interesting because the Chinese villages looked like most of the villages in Asia: empty houses, most of the young people having gone to the cities. People not hungry or starving, but quite backward. I met a barefoot doctor, no high school education, traditional medicine, knew very little. In fact, there were three doctors in my home village. Then when I asked who had hosted me for free for the weekend, I was told the export promotion bureau of Guangxi province. Everything was free, and I insisted on paying, but they said no, you will more than repay us.

Elisabeth Rosenthal: Did you or anyone on the panel get a chance to talk to people about healthcare. I think this is something I would like you to address a bit. I was traveling around China generally as a general reporter, but what people complain to you a lot about was healthcare and their costs and that they couldn't afford things: they couldn't

afford to go to the doctor. Yes, maybe the vaccination itself was free, but going to the doctor would cost money, there was a fee for the syringe, for the needle, for the cotton, etc. Have you all heard that?

Gill Bates: The doctors in China today I have likened to the stereotypical image of a lawyer in our society: They are shysters, and they are out to rip you off. That is the image. There are doctor jokes in China like we have lawyer jokes.

Lincoln Chen: Violence in the workplace is very heavy. Being a doctor is dangerous.

Gill Bates: The patient provider relationship is very poisoned. It is not a trustful one. That has all sorts of knock down effects. People will wait to the last minute before going to the doctor because they think they are going to get ripped off. That has problems in terms of prevention and cure. Then you have this problem that you have mentioned when because doctors are so poorly paid with their official salary. If you are a doctor at a hospital, you are expected to help meet bottom line by overcharging patients basically for all sorts of diagnostics and other prescriptions that they don't need. That is the fear that every patient in China seems to have about having to deal with the medical profession.

Lincoln Chen: In surveys from the rural poor, half of the people with ailments don't go to a doctor because they can't afford it. Half of the people in hospitals cannot stay to complete their hospital course because they can't dig up the additional cash that they need after admission. So you have that plus when I visited some of the county hospitals a lot of inappropriate treatment occurred. There was a whole role of kids getting intravenous fluid. When I asked, they said were just there for check-ups, but they were getting their IV bottles for a charge before being sent home. Not only access, but the actual treatment and prevention is getting severely disturbed and imbalanced.

Gill Bates: There are insured people in China who work for a state enterprise or the government. Some of the more wealthy people can afford it. Or even western companies outfitting in China provide some health insurance. But the problem there we come to find out is that there is no oversight or attempt on the part of the government health insurance provider or the ministry of labor and social security to make sure that doctors are not over prescribing. They basically take everything the doctor sends them and reimburse them. So again the incentives for the doctor to over prescribe is great.

Frank Hu: It is certainly a major problem in China. In the U.S. we pay about 10 percent of our health costs on drugs, but in China it is 60 percent. 60 percent of the money is spent on drugs and a lot on fake drugs. Over prescription and counterfeit drugs are a major problem. China just established an FDA in China to oversee the medications and prescriptions, but I think China has a long way to go in terms of controlling the costs for medications. The main problem is that the hospitals. There are no separate pharmacists in China. The hospitals are responsible for dispensing the medications to the patients. So the hospitals become for profit organizations, and they want to charge a higher price. Also, the doctors want to prescribe more drugs just to make more profit. That is the fundamental problem. There is no separation between the drugs and the hospitals.

Elisabeth: We like to say that the system of medical care in the U.S. is broken. It sounds like the system in China is more broken. People are very angry. How much pressure is there on the government to deliver something? What are the possibilities for creating something new? This obviously is not going to wait another ten or twenty years to be resolved. People are angry now. I know even though the Chinese don't vote, their anger is a very powerful force.

Gill Bates: You probably saw the article by your colleague Joe Khan in the *New York Times* on Monday. I think that is a sign of more to come. That is how the anger is being vetted. This all came out of a Hong Kong human rights organization. There was a riot involving a couple thousand people against a hospital, including vandalism and trashing of equipment inside the hospital because a young boy had ingested pesticides. His grandfather took him to the hospital but didn't have the money to have it taken care of. He went out to get the bags of money that he needed, and the boy subsequently died in the hospital. What I found interesting that I found out later, the town in which that happened is Guan An Sichuan Province, which is the home town of Deng Xiaoping. There are probably many other examples of this that we just haven't heard of—this kind of anger.

Frank Hu: This is a paramount concern for the Chinese leaders. I know that in 2003, the Chinese leaders began to realize the seriousness of this issue, especially in rural areas. So they launched a new initiative and new cooperative medical systems, which subsidizes health insurance for farmers. The money put in this system is so low and small. Some is \$2.50 per a year per a person. If you have cancer or heart disease, that is nothing. I think the government has begun to realize the importance this seriousness and began to address this problem. But certainly the efforts are not sufficient at this point.

Lincoln Chen: The communist party planning committee met October 8 and 10. This area was very much high on the priority on what to do. How to do it and what to do is not so simple. Obviously more resources are needed. But to put more resources in, China will have to revamp its public financing system that has been highly decentralized so that the poor regions just have had much less money to be able to deal with these type of problems than the wealthier areas. Even if you had the public finance, I think to re-align the medical man power, the incentives in the institutions, including profit making, it is vast challenge for China. Basically, I would say that they are heading toward the American style system and the problems we have with only 5 percent of the GDP growing to 15 percent unless much more dramatic interventions are made. I think they will end up with an American system basically because what they are trying to do right now are what I called elements of the American systems. So that is basically where China is going. I think it is a frontier challenge. It could be that they will craft something that is better than the United States. I wouldn't put it past the Chinese to be able to do that. They are very pragmatic people.

Elisabeth Rosenthal: You can take this anywhere you want. Now you have in China the kind of problems of two extremes in the health systems. You have burgeoning problems

of prosperity: the diabetes, heart disease, obesity. Yet you still on the other hand have a huge burden of basic infectious disease issues growing: hepatitis, tuberculosis, etc. Systems are often geared to doing one thing or the other. Here in the U.S. we have the luxury of focusing on one end of the spectrum. In some of the developing world there is much more of a focus on the infectious disease end--I just got back from Cameroon. But here you have China, this country of extremes. You need a system that does both pretty well. How do you maintain quality in both these areas?

Gill Bates: Part of the problem again gets back to the incentives for the provider. In some of these issues like HIV/AIDS or SARS or tuberculosis, the enormous amount of good can be done through preventative measures. Make sure that you don't get the disease in the first place and people are well informed about how to avoid that. But there is no money in that.

Elisabeth Rosenthal: Is that being done now?

Gill Bates: That job is going to fall to the Chinese Center for Disease Control (CDC) and Prevention. That is going to be a government task because the doctors and the for profit sector are just not interested. There is no money. They want you to come in sick because that means you get some dough. They are not going to tell you how not to get sick. That is for the government to do. In terms of resources, for those types of diseases, a lot more has to go into the CDC system to do a lot better job in terms of prevention. On the other side, dealing with the issues that you are concerned with, that is for the for profit sector.

Elisabeth Rosenthal: Do they do a good job? What is the quality of care like for those people?

Frank Hu: This is the phenomenon we call dual burden disease. We have 24 million people undernourished. But on the other hand we have 60 million people overweight and obese. These heavy burdens on both sides are very important for the health care system. What is ironic about infectious diseases is that before the economical reform, a lot of these diseases were basically gone, especially parasite diseases and even TB were not very common in the remote rural areas. But recently both of those diseases have re-emerged, especially TB. TB has become the leading cause of death for infectious disease. This area can be relatively easily controlled through government efforts, which was demonstrated twenty years ago before the economical reform. Intensive chronic disease is more complicated because people have been starving for decades. They want to enjoy life. They want better food and western food. They want to drive a car instead of riding bicycles. That became enormously challenging given the economy will continue to accelerate in the next several decades. All these conditions—hypertension, diabetes, heart disease, even cancer—require lifetime treatment. All those drugs are very expensive. We have this huge disparity between the modern cities and the rural areas in terms of controlling these conditions. People talk about three worlds in China. The first world is the coastal area—very rich cities like Guangzhou and Shanghai. Then you have the second world which is the middle part of China like WuHan my home town. Then you have the third world, which is a more western rural area. There is more than ten year

difference in terms of life expectancy between the first world and the third world. There is ten fold differences in infant mortality between those two different areas. So these disparities are unbelievable.

Elisabeth Rosenthal: I want to make sure that you all have a chance to ask questions. Please give your name an affiliation.

Question: I am Helena Colenda with the Luce Foundation. I was curious with the breakdown of the barefoot doctor system and your discussion of barefoot doctors providing vaccinations. With the clinics now, with the fees that are associated with the syringes and so on, is there a reduction in the number of children who are getting vaccinations? What is the impact of that?

Lincoln Chen: That is my impression, in some areas definitely. Immunizations have gone down. In fact, mortality has gone up in some areas. Certainly the mortality improvements have slowed down significantly in the country overall. Whereas, for example, twenty years ago China was the same as Sri Lanka. Sri Lanka—which has a civil war—has got longevity that is three years longer than China today. China has definitely not done well these last two decades.

Gill Bates: This gets back to the incentive question. There are lots of government funded free programs that are supposed to be provided to young people and people with HIV/AIDS. The problem is that the for-profit health sector is not incentivized to provide free vaccinations or provide free drugs because there is no profit. So it falls again to the Center for Disease Control clinics to be active and be doing this for free. But the for-profit sector is just not interested. A way to fix that would be for the Chinese government to incentivize. If for every patient that you vaccinate will give you this much, that has to have oversight. You have to make sure that doctors don't have 4,000 patients that they did have before to get the money out of the government. I think it could be fixed. You have to work on the incentive structure between the patient and the provider to make it work better.

Question: My name is Ch'ing La. I am a reporter from Radio Free Asia. Can any of you comment on China's intention to have Margaret Chan in the WHO. Because according to what I have read she is the one criticized during the SARS outbreak in Hong Kong, supposedly under direction of the Chinese government to cover it up. What is China's intention to have her in WHO? Is it because if the epidemic broke out in China, she could get more world resources to help or to cover the news up?

Lincoln Chen: I think Margaret Chan is a wonderful election. I think she is a very competent health administrator of Hong Kong. My understanding is several folds. One is that I think China has been looking for more of an international role. In this area the prime minister of China went to Africa in April/May and actually pledged health support and foreign aid to seven or eleven African countries. So the extension of China out into the global community is now going to accelerate with Margaret. I think she will play the whole information and the China government relations quite carefully. I think you will

find that she is quite circumspect with that. Finally I will conclude by saying there were rumors that the Chinese entered her and pushed her despite I think conflicts within the government because every year the World Health Assembly—Taiwan and China—have a fight for one day. It is Taiwan's admission as an observer status into the WHO. Every year the proxies are the African countries. They get funds from either Taiwan or China that lead this to be. I have been to the last two health assemblies watching this. It is a shadow play. Taiwan always gets turned down. But the Japanese put up a very effective candidate and have a lot of money behind it. I think perhaps the Chinese could have been concerned with a more Taiwan sympathetic head of WHO that would have had political implications beyond the informational exchange related to the epidemic. Right now the only debate is access to samples of viruses in China. Some of that I think is quite complicated. It is not as straight forward as the press is reporting it that the Chinese are not giving the sample. I think the Chinese also feel that when they give the sample, they don't get information back. There are just simply some relational issues there as well.

Elisabeth Rosenthal: Since I was in China covering SARS in those years, I think it is a bit misleading when people have been calling her the Chinese candidate because she was the Hong Kong health director and was often in conflict with health authorities on the mainland over how to handle SARS. She was very aggressive very early on while her colleagues across Guangzhou were saying there is none of it here.

Lincoln Chen: Let me again comment. The rumors were that the official ministry of health was not initially as supportive. It was the Vice Premier, who was the minister that handled the SARS epidemic that overruled. Then the government came into line. It is very much as Elisabeth is saying. It was not a purely simple picture of China trying to grab the WHO. She is a very fine international civil servant.

Question: I must confess, I am even more alarmed after hearing all of your characterizations of so called crisis. To me, the extreme of the wealth in the emerging economy is a societal crisis. It is everywhere across the entire fabric woven into the entire nations in the world. The real problem with the health issues that I looked at, especially with these strategic policy advisors. Most of you said "they may be adopting the western model of America or Europe." The problem rises recently when there is such a movement, i.e. a draft proposal banning herbal Chinese traditional medicine. To me, it should be integration. It is a holistic approach thousands of years old. Instead of saying now we are adopting western. Then it raises FDA process. I was in Shanghai and Tibet recently, and yes, there were social medicines in some areas, but everything in Tibet costs three times as much. When I was in Shanghai I had my foot massage reflexology, it costs one third what they would be charging in Tibet. It is not just commercialization; it is the FDA process, the herbal, and banning the FDA process. To me that was a major crisis.

Lincoln Chen: My own personal experience is that the Chinese integrate traditional and modern very well. In fact, when I went into the Peking Union Medical without my being able to yip a word, I was treated with acupuncture in my back for the spasms I was having. It was right in a very modern hospital. They had a whole traditional section, and it was absolutely integrated.

Frank Hu: I was trained in western medicine, but like all the medical students in China and Western Medicine training programs, we spent at least half a year to one year in traditional Chinese medicine, learning the herbs and acupuncture. Some of my colleagues actually became traditional Chinese medicine doctors after they graduated. There has been very good integration of traditional Chinese medicine with western medicine. All the major hospitals have separate departments for traditional Chinese medicine. The issue comes down to the so-called evidence based medicine. In western medicine, everything has to be proven by clinical trials. All the therapies and medications should be proven by clinical trials. But in traditional Chinese medicine, very few therapies have been proven. So we don't have this so-called evidence based medicine. A lot of people are very unhappy about the so-called evidence in traditional Chinese medicine arena. Some of the therapies that have been practiced for thousands of years are supposed to be affective, but proven to be ineffective in the most rigorous studies conducted in the U.S. or in other countries. That causes doubts in many of the current practices in traditional Chinese medicine. I don't think in China traditional Chinese medicine is going to be banned; I don't think that is possible. I think improved evidence base and improved standard practice of traditional Chinese medicine is the direction they should be going.

Question: This is a question for Bates and perhaps you Lincoln. Have you heard anything in your travels in China about how the Chinese might use their trillion dollars worth of reserves to fund new health insurance and other schemes? Can you list some of the crises and issues that we have been talking about today?

Gill Bates: As I think some of the speakers have mentioned, there is at this time, an effort to introduce a very basic universal health insurance program in rural areas where by individuals pay 10 Yen a year. I think the provincial government is expected put in twenty and then the central government puts in twenty. I have not done the math yet, but it does not come anywhere near a trillion dollars once you multiply all that out. There is thinking. They are thinking about it for sure. I think that the problem that I foresee in health insurance schemes is that there is no actuarial science. There is no regulatory oversight. It is ripe for abuse. It is already being abused in the current system. While the ideas are fomenting, I don't think they have yet really locked on to something that is going to be affective and work. This is ripe for a U.S.-China discussion. We want the Chinese to boost domestic consumption. If we can get an insurance system that works, that means that those rainy day funds might get spent on something else domestically for consumption purposes—maybe even buying American imports over time. So we have this grand economic interest to push the Chinese towards a more viable health insurance system. But it is not going to happen tomorrow. It is going to take decades to get in place. Elisabeth, I would like to hear your sense of things because we haven't heard from you at all, and you have watched China now. Give us your thoughts in conclusion.

Elisabeth Rosenthal: I think for me this is one of those areas where a solution is needed faster than China typically provides solutions. With environmental law, health law, legal reform, there is this notion that you pass a law and it slowly over a long period is put into a reality. The level of anger and the dysfunctionality I am seeing and hearing from my

colleagues who go back come from both ends of the spectrum: basic preventive health, basic vaccination, and basic infectious disease control on one end of the spectrum and diabetes care and cardiac care on the other. I see a system that isn't serving either very well and doesn't have either an economic or scientific structure that will move in an improving direction easily.

Frank Hu: Asthma has increased dramatically. Almost every week, you've heard big news about pollution of water and air in the cities, even in rural areas. The pollution including the air pollution has a tremendous impact on health, including cardiovascular disease, respiratory disease. Smoking itself is a major pollutant. Smoking at this point causes major public health problems. There is a publication recently showing that cigarette production actually increases the poverty rate in both urban and rural areas. The reason is simple because the more likely you are to get heart disease, lung cancer, and your medical expenditure increases a lot. Your medical expenditure increases a lot. For this reason, it actually increases poverty.

Elisabeth Rosenthal: China has made progress in a lot of areas, but this is clearly a big one where there is a long way to go and no easy way forward.

Lincoln Chen: I was meeting with a group of Harvard students who had gone out to look at healthcare in China, and I wanted to be educated. They came in with packs of cigarettes and put them on the table. They said they got them when they visited the health department from the doctors. I said, "Come on." They said they were saving them as museum pieces. But more importantly, they said that many of the doctors don't believe in the data that cigarettes cause cancer. Again, I said this is truly astounding. But that was the report back from young medical students in visiting China.

Frank Hu: The minister of public health is a heavy smoker.