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BRAVE NEW WORLD OF HEALTH CARE

Leader: DAPHNE D. BARTLETT
Speaker: RICHARD D. LAMM*

MS. DAPHNE D. BARTLETT: Our guest speaker served as Governor of Colorado from 1975-87. He's currently a professor and director of the Center for Public Policy and Contemporary Issues at the University of Denver. Born in Wisconsin, he obtained his bachelor's degree from the University of Wisconsin and his law degree from Boalt Hall at the University of California, Berkeley. He's also a CPA and his resume tells me many years ago he was a lumberjack in Oregon and a deck hand on an ore boat in the Great Lakes. One of his several books is *Mega Traumas, America in the Year 2000*. One of those mega traumas surely will be the brave new world of health care in the United States.

MR. RICHARD D. LAMM: I should like to begin with a parable and the parable is about a friend of mine who was a foreign service officer in Lima, Peru. And, as you know, those are hard-drinking, hard-living jobs. One night after the fifth embassy party, he was at a particular embassy and, all of a sudden, this beautiful music started up, and across the room he saw this lovely figure in a red velvet gown and he went up and he asked for a dance. Now the answer was, "No, for three reasons. Number one, you're drunk. Number two, this is the Peruvian National Anthem. And, number three, I'm the Archbishop of Lima."

I call it a parable because I ask you not to confuse me with somebody who wouldn't like to do everything for everybody that medical science has invented, but it is my thesis here that we cannot, that we simply have to have the maturity to recognize that the miracles of American medicine have simply outpaced our ability to pay.

Now there are certain things that very much differentiate the world as it is today and the world when we here started our professional careers. Let me go through at least a couple of them. I think the most significant thing that's happened since World War II and the geopolitics of this nation is that we now compete in an international marketplace and we all know that, but I think that the full implications of it still have not sunk into most Americans. I quit politics to essentially look at what's in the knapsack. What's in the knapsack? It didn't make a damn bit of difference what was in the knapsack when I started my political career because we weren't competing with these other nations. We weren't on the same trail with them. But now it makes a great deal of difference how heavy our burden is on American goods and services. Well, two-thirds of all the world's lawyers are in the knapsack. So are the highest health care costs in the world, as you know, the largest number of functional illiterates of any industrialized country, the largest amount of drug and alcohol abuse in the workplace, the highest cost of electing politicians to office. Now it is my thesis that we simply have to be very concerned about what's in that knapsack, because we live in an international world and one, by the way, that we're not winning in.

* Mr. Lamm, not a member of the sponsoring organizations, is former Governor of Colorado and is Director of the Center for Public Policy and Contemporary Issues at the University of Denver in Denver, Colorado.

This is the record. Here's my political career. When I was elected Governor we were the world's largest creditor nation. When I left we were the world's largest debtor nation. When I became Governor we were an exporting nation. When I left we were an importing nation. When I went into politics anyway we had the highest rate of productivity growth of any of the industrialized world. When I entered the Colorado legislature in 1967, America was doubling its wealth every 30 years. Now it's every 130 years and the average American worker, as you know, makes less money in 1990, adjusted for inflation, than they made back in 1973. Well, now we have among the lowest rate of productivity growth in the industrialized world. When I entered the political process, the largest banks in the world were largely American; now they're Japanese. You've got to go to number 21 on the list of the world's great banks to find an American bank. When I became Governor the epicenter of world finance was on Wall Street. I think today arguably it's in Tokyo. When I became Governor, we as a nation were producing more than we consumed; now we're consuming more than we produce. I did a hell of a job! I mean seriously I've got to tell you I have a very guilty conscience. For 10 generations American mothers and fathers left better educated children a more competitive economy. Our generation broke the link. We broke the faith. The trade deficit last year, just last year, one year, was the equivalent of sending abroad American wealth equivalent to all of the common shares of General Motors, Ford, Chrysler, plus Texaco, McDonalds, and Coca Cola with enough money left over to buy all of the farmland in California and Ohio. So we live in a new world and we put some terrible monsters into our children's futures. We've hung an albatross of debt of incredible proportion around our children's neck, and with the trade deficit, we simply have not left them as competitive an economy.

Now my thesis then ultimately isn't companies that compete, it is societies that compete. No matter how inventive, how creative our management is, if you tie them down in endless litigation and excessive health care costs and unskilled workers, it doesn't make any difference how creative they are; their managerial expertise doesn't make a difference. They are not going to compete because we have put too heavy a burden on them. So I'm intrigued about how we do fund the excess, the inadequacies of one part of a system, out of the excesses of another part of the system.

If I were health czar of America I wouldn't spend another dime on health care for four or five years, maybe three or four years, but there is so much inefficiency, so much waste that we shouldn't spend another dime. We're already spending 50% more than our international competitors and not keeping our people as healthy. Why should we even put another dime in health care? You've seen this. You know it better than I. When I entered high school we were spending $1 billion a month on health care. Now we're spending almost $2 billion a day on health care. It's growing at 2.5 times the rate of inflation, and Bloom at the University of Pennsylvania has come up with a new figure year. The new year is now 2058, and that is the year that we'll be spending 100% of our gross national product on health care. Well, obviously, that's not going to happen. No trees grow to the sky, but to me it shows that the hard decisions in health care aren't behind us.

The doctors in the hospitals, with some degree of validity, will tell you about all the hard decisions that they've had to make over the last 20 years. Wrong. Compared to the decisions that lie ahead of us, those decisions were child's play. So the United

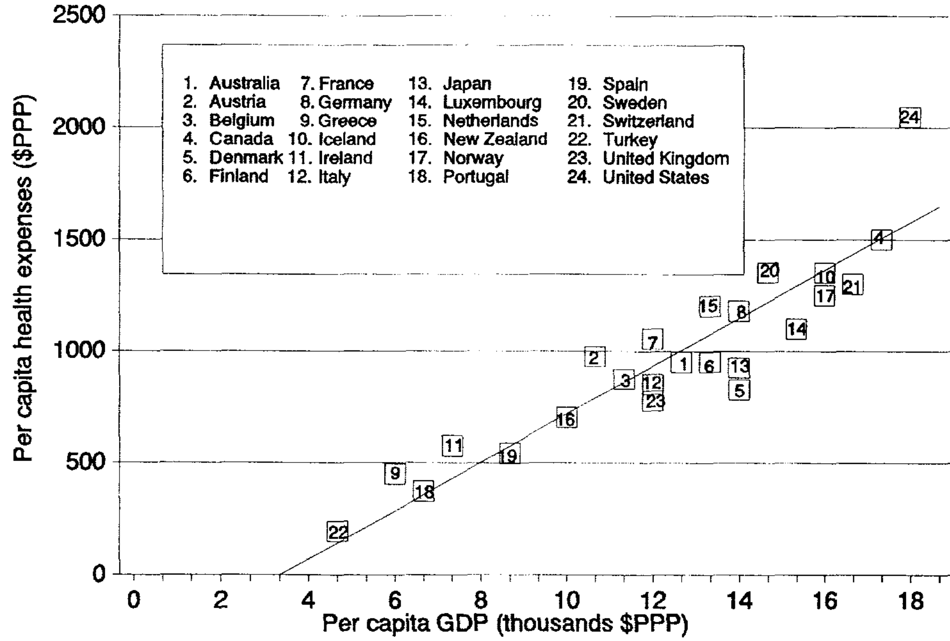
States, again, is way up there. (See Chart 1.) And, again, as somebody who is looking at public policy, I want to find a way to bring us right down to the trend line. Our competitors all keep their people healthier. If we could get down, we would save $60-80 billion a year that we would have something else to do with. So this again shows that the health care costs in America are significantly higher than our international competitors, sometimes two or three times as much. Again, a country can't run on a competitive economy when its health care costs or any major part of its overhead is two or three times that of its competitors.

Now however bad it is, there are certain things that you know better than I that are making it worse, one of which, of course, is the aging of America. The fastest growing demographic group in America are people over 85. Actually, that's not right. Actually, the fastest growing demographic group in America are people over 100, albeit from a small base. In fact, Willard Scott introduces you to most of them. You get to know them. But this is a demographic revolution of unprecedented proportions, I mean, unbelievable proportions. At the time of the Declaration of Independence the average age in America was 17. By the Civil War it was 18. When I got out of college in 1957, it was 23. It's now 33. It will soon be 38 and I believe you expect it to go even higher. We had a very small increase in life expectancy until the year 1900, and then a demographic explosion of which we fully don't know. We don't know how to run a society that has an average age of 35, twice what the average age has been for most of human existence. But every year since the year 1900, we've increased about three months of life expectancy. We've added 28 years to human life expectancy and that is a demographic. I mean we're sailing on uncharted demographic waters.

Another thing that is changing dramatically is that the elderly are no longer disproportionately poor. A very important part of American public policy is that the elderly now have the largest discretionary income of any group in America and poverty is much more found wearing diapers than it is wearing a hearing aid. So yet despite that, we give most of our money to those people who lobby us the hardest. Even though about 61% of federal social spending is spent on the elderly, it's, as you know, the most powerful political group in America; it's the one that votes the most on the issues that it cares about. Social Security and Medicare are often described as the third rail of American politics. Touch it and you die.

But we have to confront the kind of world we're leaving our children. You know some of you might think I'm too pessimistic. I'm absolutely convinced that when you look from my standpoint, you look at these problems facing America and you look at the trade deficit, the federal deficit, and the educational deficit, which probably worries me more than any of those, and when you see the potential for economic chaos in this society I think that you've got to look at every institution that we have and ask, how do we make it more efficient and effective? Is that too pessimistic? I don't know. Hell, I'm in politics. I can make things sound better than they are. I coach my son's little league ball team. We had a five and five season this year. We lost five at home and we lost five on the road. I don't think it's being too pessimistic. In last year's federal budget, we increased defense $9 billion, Social Security $16 billion, interest on debt $13 billion, Medicare and Medicaid $20 billion, and everything else we did in government $13 billion.

CHART 1



The Wall Street Journal stated one year ago that within 15 years Medicare outlays would equal those of either defense or social security and seven years after that Medicare spending would equal that of social security and defense combined. It said this money pit has become a black hole that threatens to suck in the entire budget. That was one year ago. The new date is 11 years. In 11 years Medicare will equal either social security or defense, so it is simply unsustainable, as is the amount of money that we are spending in health care, as is the amount of money we're spending on the elderly in health care. Right now the elderly get about a third of our health care dollar. By the year 2000, they'll be about 16% of the population and we are told shortly after the year 2000, it is likely that they will be getting half of the money we spend in health care.

The second thing that I'd like to specifically mention and one that you know well is this incredible creativity of the health profession. There was a special session on bone marrow transplants and what that's going to mean. We are told that sometime in the next century the younger people here will meet a human being who will have over 50% of its body weight in bionic parts. I mean it just boggles the mind. The doctors last year started a motor that is two-thirds the width of a human hair that will be able to go through our system and do microscopic cell repair, the mapping of the human genome.

Now Table 1 compares end-stage renal disease kidney dialysis, but it could I would suggest be almost any medical technology, something like an Extra Corporal Membrane Organ (ECMO) machine, that is age specific. Virtually every medical technology soon works its way up the age ladder. The fastest growing group with end-stage renal disease are people over 85; with a rate of growth of 1258% for the last 10 years we have records for, albeit from a small base, so let's look at age 75-84. There you have again a 545% increase. So medical technology is marvelous. Believe me, I understand. Whether it's MRI machines or lithotripsy it soon works it way up the age ladder and we find that we're spending most of the results of this medical technology at the end of life or at the upper years of life.

TABLE 1
Medicare End-Stage Renal Disease (ESRD) Enrollment

Age	1978	1987	Percent Increase
All persons	44,193	123,743	180
0-14	534	1,498	181
15-24	3,013	5,217	73
25-34	5,845	14,713	152
35-44	6,913	20,007	189
45-54	9,139	20,853	128
55-64	10,101	28,252	160
65-74	7,011	24,290	246
75-84	1,557	10,037	545
85+	80	1,086	1,258

I was elected to the Colorado legislature in 1967. We could see that health care costs were running away even in 1967. So as typical politicians we did regulation.

We did certificate of need. We did hospital cost commissions. We did a wide variety of things like that in the 1970s. Of course, the federal government got into regional health plannings and all of those others. To our absolute shock and amazement we found that health care costs grew faster under regulation than they did before we started screwing around with them. So in the late 1970s and 1980s we went to competition. We're going to let Adam Smith's invisible hand control health care costs. To our absolute shock and amazement we found that health care costs grew faster under competition than they did under regulation, which grew faster than when we started screwing around with it. We found that towns with two hospitals most often have higher hospital costs than towns with one hospital. That's the work of Hal Luft at the University of California. I know many of you are familiar with that. We found the more doctors you add to society the higher the costs. There's no evidence. Doctors are like lawyers. They seem to have the ability to expand their share of the pie. Now why doesn't competition work? We haven't given up on it. I believe that, again, consumers are poorly informed about this.

My wife had a mastectomy. What did I do? You know after taking a great interest in health care, well, I went and threw myself on the best doctor possible and just blindly followed orders.

A second reason that competition doesn't seem to work is that insurance reduces consumers' interests and sensitivity to price increases in any savings in the overall costs of hospital care in that area. It appears that the non-HMO institution costs go up commensurate with the decrease in HMO expenditures. The ability to cost shift among the health providers is so phenomenal that even in the HMO area, those costs that are saved by the patients and clients of the HMO will find their way into the cost stream in some other part of the system. Can we make this a mega priority? Can we just simply say, "Well, we can go to 20 cents out of every dollar in America." You know you cannot have American goods and services spending three or four times what our competitors spend. You just can't do that and remain a competitive nation.

The problem with technology that we're finding is that while technology will probably save the Broadmoor Hotel money, their computers and billing and things like that, I believe that there is very little empirical evidence that technology saves the health care industry money, but it's for a variety of reasons. First of all, most health technologies are duplicated. I spent a summer at the University of California Medical School. What have we discarded in medical technology? There are some things. After using the Wasserman Test for 30 years, we found it had 50% false-positives; the gastric freezing of peptic ulcers is no longer being done. But in medical technology the CAT scanner comes in and sits next to the X-ray machine and the MRI machine comes in and sits next to the CAT scanner which is next to the X-ray machine. So much of medical technology is additive.

Number two is the woodwork problem. We have found the MRI machine is similar to the lithotripsy machine, which drives down unit costs phenomenally. The more people come out of the woodwork to use the technology, the more they eat up in costs compared to what you've saved by the increased efficiency of per-unit cost. So I would suggest to you that again these volcanic health care costs that we've tried to contain in the last 30 years have essentially failed. We cannot take much

credit for any of them. Do I give up on any of them? I don't give up on some. I think we can do better in these areas. But anyway, my argument is the inevitability of admitting that everything that we've done has failed, and we're going to have to go on to new and more draconian ways to put these costs under control.

I'm a democrat and the democrats are going to solve all of the world's problems by cutting the defense budget. You know as Moe Udall says, when the democratic party forms a firing squad, we form in a circle. Look, folks, I'm for cutting defense spending. I don't know a responsible person who thinks that it can be cut in half, but if we would cut defense spending in half right now, with health care costs rising as they are, in three or four years we would have eaten up all of the money that we would have saved by cutting defense in half. Defense is only a $300 billion budget in America. Health care is a $700 billion budget. It is not going to solve our health care problems. So maturity is the recognition of our limitations. That's what was told to me when I was 19. At 19, I wanted to read every book, hold every job, go every place, date every woman. You think that you can do everything in life. Well, it doesn't work out that way. You know you have to only take one job and maturity is the recognition of your own limitations. We have to understand that. When I started my professional career, we spent 6% of the gross national product on education, 6% on defense, 6% on health care. Today we spend 6% on education, 6% on defense, and 12% on health care, and it's growing at 2.5 times the rate of inflation. Or as the California Medical Society put in their journal last summer, getting blood out of a turnip. We have to discuss rationing limited health care resources. Or as Victor Fuchs says, we simply have to admit we can't give presidential health care to all Americans. Now that's the bad news. There is also some good news.

Now what I'd like to do is explore the waste, the inefficiency. Why is it that America doesn't keep its people as healthy as other societies? I was just in China. I just got done with a trip around the world looking at health care systems. In China, the per capita health expenditure is $38 a year. In the United States it's about $2,400 a year. China has a higher life expectancy. Shanghai has a higher life expectancy. Not all of China does, but Shanghai has a higher life expectancy than the United States, and its infant mortality rate is substantially better than New York City. So wherever you look, we don't keep our people as healthy. Our health statistics are not as good as they are in Europe or in Canada or in Japan and not even as good, unfortunately, in some of these key areas like infant mortality, as they are in many, many other countries. I mean it's incredible to go to Malaysia and find that your health statistics aren't as good as theirs are.

Why is it we don't keep our people as healthy? Well, let me say that, first of all, most of the reasons have nothing to do with the health care system. No society has as many guns as we do, drives as many miles as we do, is a heterogeneous society and has as much drug and alcohol abuse in the workplace. In other words, there are lots of reasons outside the health care system as to why our health statistics are so dismal. Health care systems in other societies give basic health care to all of their people and they have healthier people. I mean it is absurd to have a society with 37 million people essentially outside of the system for essentially a lot of reasons. Now I know certain people will say that everybody in the United States can really get care. What you're talking about is uncompensated care to hospitals and that's a problem but everybody gets care. Wrong. You take 100 sick insured people and 100 sick

uninsured people. The uninsured sick people will see a doctor 40% less, will have 40% less access to health care, so it does make a difference. It makes a great difference to the health of your society.

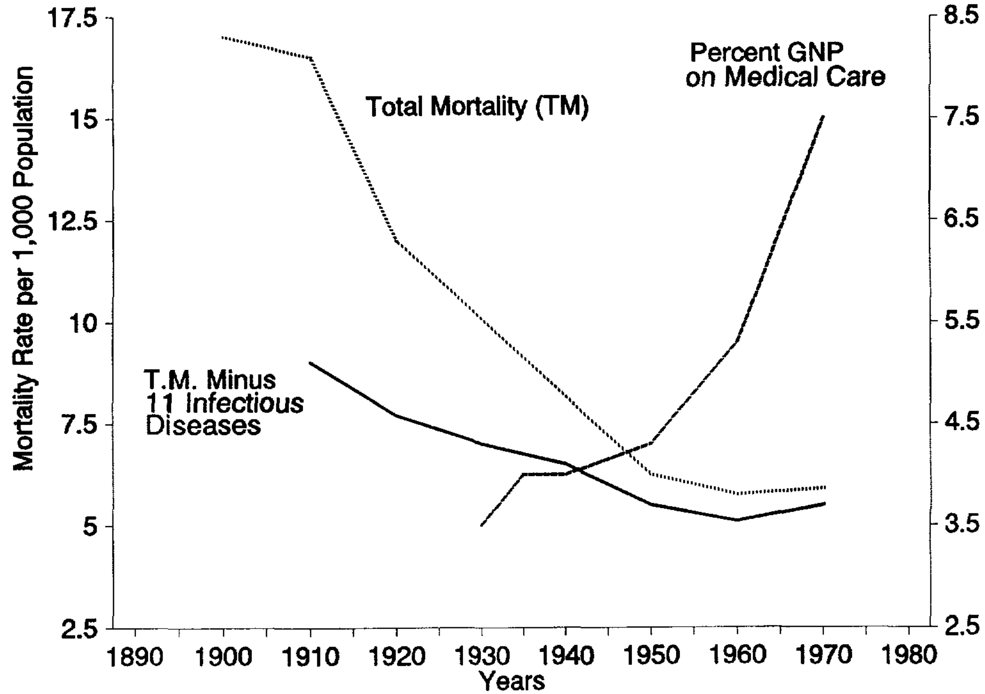
Now what intrigues me, however, is how little health care spending correlates to how healthy the society is. (See Chart 2.) This is the United States, but the same curve is found in every industrialized world, that most of the mortality drop was before we started spending money in health care. Why are we living longer? Why are we adding three months every year to human life expectancy? Well, it's because of vaccination and refrigeration. It's because of inoculation and diet and soap and a higher standard of living. The public health workers are doing so much to increase life expectancy. There's no correlation any place in the world between how much a society spends and how healthy the people are. There is, in fact, an adverse correlation between how many doctors a society has and how healthy that society is, an inverse correlation. The United States and Germany have the largest number of doctors per capita. We've got the worse health statistics. Japan has the fewest numbers of doctors, but the Japanese people are the healthiest. Now I know most of you are saying, wait a minute, there's something very fallacious about that statistic. You're right. You're right. I'm not claiming perfect statistics, but it does show you. I had a guy the other day prove to me that the average person in Miami, Florida, is born Cuban and dies Jewish. But it isn't wrong or inaccurate to say that how much society spends on health care has got very little to do with how healthy that society is. It generally has to do with other factors.

Now the same thing applies today in America. You can't ask, what do people die of? I mean you may ask that for your reasons, but from a public policy standpoint what interests me is why do people die before their time? That's a very different statistic. If we all must die, the question is why do people die before their time? We find out that two-thirds of all the deaths before the age of 65 are self-inflected deaths. We do them to ourselves. How do we do them? Well, tobacco kills 360,000 people a year. Alcohol and drugs kill 110,000 people a year. Diet probably kills another 200,000 people a year. I mean all of those involve the mouth: smoking, alcohol, diet. The mouth is the most dangerous organ in the human body. Not abusing alcohol, not smoking, having a moderate diet, and wearing seat belts, all add up to an incredible percentage of the health care agenda for anybody under 65.

Okay, let's continue. Where is it that America doesn't adequately focus its money? I would suggest to you we have too many doctors, we have too many specialists among those doctors, too many empty hospital beds, and too much duplicating technology. Let me take them one at a time. Too many doctors. Health and Human Services (HHS), estimates that there are 40,000 surplus doctors in the United States right now and by the year 2000 there will be 120,000 surplus doctors. Now there are some thoughtful people out there, Bill Schwartz at Tufts is one of them, who argue with this. I think he's a very competent guy, but I think the evidence is really clear. The HHS uses a special group, Geminec in North Carolina, to estimate how many doctors a society needs. We are expecting that there are already too many doctors and, of course, there's going to be 22% more doctors in the year 2000 than there were back in 1986. We know that. They're in the pipeline and doctors seem to control demand and adjust for any income shortfall by performing

CHART 2

Percentage Gross National Product



and billing more services; the ability again of both doctors and hospitals to enlarge their share of the human pie, of the fiscal pie.

Second of all, most countries train 20% of their doctors as specialists. We train 80% of our doctors as specialists. It is absolutely inexcusable to train so many specialists. I might also say, no other nation has as many dissatisfied doctors, despite the fact that they have the highest earning multiple ratio. No nation compensates its doctors at a higher multiplier of the average wage in that country. But I think it's also fair to say there's not as much noise in this system. The dissatisfaction of American doctors is very acute and, by the way, very real and for some valid reasons. Bill Kissick at the University of Pennsylvania did a very interesting study and I don't want to cite it as any kind of proof, but it's something you ought to see. He says, "Kaiser serves six million subscribers with 6,600 physicians at a cost of $6.1 billion." If that could be done nationwide, and he recognizes that it fully couldn't he says, "Forty-four Kaisers could provide all the primary and secondary care to 246 million Americans with 290,000 physicians." That's half the number, less than half, than we have right now at a cost of $268 billion or approximately 5% of GNP. So even though nobody says this is an exactly accurate way of doing it, I think it clearly shows that how you organize your medicine has a great deal to do with how many doctors you need.

No nation has as many empty hospital beds as the United States. There are 300,000-400,000 empty hospital beds in the United States. Fifty-three percent of the hospital beds in this state are empty at any given time. I cannot tell you the frustration of running a state when your bridges are falling down, your roads are inadequate, your school teachers are underpaid, and yet 53% of the hospital beds are empty. That doesn't only apply here. Sixty percent of the 50 largest metropolitan statistical areas are operating under 70% of bed capacity. Now 300,000-400,000 empty hospital beds in America is equivalent to 1,000 hospitals. If you close down the fifth floor of every hospital in Colorado Springs or Denver, you're not going to save much money because the question there, as you know, is the staff to beds ratio. But if you close down one out of five hospitals in Denver, you save some real money. You've increased the occupancy ratio of other hospitals. You do away with a lot of the medical technology, a lot of the infrastructure, the advertising, the billing department, the hospital administrators. So there is this question of just plain having too many hospital beds.

You also have that question of the medical arms race, the question of too much technology. Why does City Hospital have an atomic scanning rhinoscope and we don't? And, of course, City Hospital is saying, "Why does Memorial Hospital have an isotope tricker and a viral calculator and we don't?" You have this medical arms race that's going on and when one hospital has something, the other hospital has to have it. You know you go on and on and you get these absurd, absurd things. *JAMA* did a study earlier this year. It estimated that there's four times more mammography equipment in the United States than we can realistically use. Four times as many machines. What happens when you have four times as many machines? You have to raise the unit price of a mammogram. What does that do? That drives some American women out of the price range of being able to have a mammogram. It's absurd. You've got four times more equipment than you need and you're driving women away. The more that I looked around at other countries and how they control their health care costs, the more that I saw that they controlled it partly

through supply. That once you have your infrastructure in place, once you have hospitals, once you have this medical technology, once you have your doctors in place, that then drives the system and you can do all you want about second opinions or whatever else, that somehow they're going to find a way to fund that excess supply.

No society spends as much on high-technology medicine. No society spends as much on death and dying. No society spends as much on the elderly. Let's take it in turn. We've got 6% of the world's population. The United States has half the CT scanners and two-thirds of the MRI machines in the world. This high technology bias in the United States in incredible. What's the result of that? Dr. George Annas at the University of Boston says we've been doing more and more to fewer and fewer people at higher and higher costs for less and less benefit. What is the problem in American medicine? Well, there's no one problem, but certainly this is one of them. We spend about 70% of our hospital costs on about 10% of our people. No other society is like this. Sure you should spend more money on people that are sick. That's the reason we have hospitals. But no other society would take 96-year-olds with congestive heart failure out of a nursing home and have them die in an intensive care unit. No other society would do that. It would be unthinkable for them to do some of the things that we do, to spend as much money on long-shot medicine as we do in the United States. Because in an ironic American way, invention has become the mother of necessity rather than the other way around. I mean we invent the machine and then we have to use it.

In 1987, the United States spent $2.6 billion on neonatal intensive care for an average of 137 hospital days and an average of about $158,000 per baby. Let me tell you how they do it in Sweden. In Sweden they do not try. They do not try to save any baby under 700 grams. They can prove to you that the way to save the most babies, to get the healthiest babies is to spend your limited medical resources on prenatal care, not postnatal salvage. If you're horrified about the idea of 700-gram babies dying without trying to do anything to help them, they look at us and they say, "You take neonatal babies in helicopters to million dollar neonatal care units, where you put them on an ECMO machine and they were born to women that you didn't bother to give prenatal care to. That's what we're doing. They say "That's a better way to handle your medical resources?" They say that's absurd.

No society does what we do. That is inexcusable health policy. Why are we 19th in infant mortality? Because we fly babies in helicopters to neonatal care units and we don't give women prenatal care.

No society spends as much on death and dying. Again, a sensitive area, but what's amazing is how many people who have had a death in the American family and who come away thinking of health care as being the enemy. You look at other societies and you see they recognize death as part of the accepted cycle of life. As Shakespeare says, "We all owe God a death." What do we do in the United States? You know no other society takes 85-year-olds with hopeless metastatic cancer and puts them on chemotherapy. No other society does that. They say you're torturing people. You're not making them better. Let me read a Letter to the Editor that I cut out of the Phoenix newspaper. It says, "Take me off the tubes and hose. Stop the IV as it flows. God forbid that I should live punctured like a bloody sieve. Respirator

bags and dope chain me here where there's no hope. Free my body from the machine. Let my end be quick and clean. Sense and spirit long have fled from the body on this bed. Send my organs to the banks. All will be received with thanks. What good reason can there be for prolonging my misery? When my vital functions cease let me go in grateful peace."

No society spends as much on the legal system. No society spends as much on defensive medicine. We medical practitioners do our very best; nothing is more sacred to us than the doctor-plaintiff relationship. But it's true. Look at the tort system. (See Chart 3.) This isn't only in medical health care. This is across the board. No society has as much ratio of tort costs to its gross national product.

No society litigates near the degree that the good old United States litigates. Do we know what to do? Of course, we know what to do. All we have to do is look at every other industrialized country where there is alternate dispute resolution, reduced class action suits, comparative negligence, reduced jury trials in civil cases, etc. We're the only country in the world that has a jury trial in a civil case. Now the trouble with this, from a cost standpoint, however, is a recent study, that many of you are aware of, done at Harvard of the New York hospital system. Jeff O'Connell, who is the author of *No Fault Automobile Insurance*, ten years ago said that the excesses in malpractice are going to be needed to compensate victims of people who now get nothing but yet are injured by injury. And the Harvard study, of course, showed that. Harvard estimated that adverse events in hospitalizations in New York were to be 3.7% of admissions and of those, 27.6% were due to negligence. So essentially about 1% of hospital admissions had something negligently happen to them. The Harvard study estimated that eight times as many patients who suffered an injury from negligence in the hospital have filed a malpractice claim in New York State and 16 times as many people who were injured by negligence in the hospital system have received compensation from the tort liability system. So, unfortunately, while I think defensive medicine and litigation is still one area of savings, I think the Harvard study makes us very cautious about promising too much in that area.

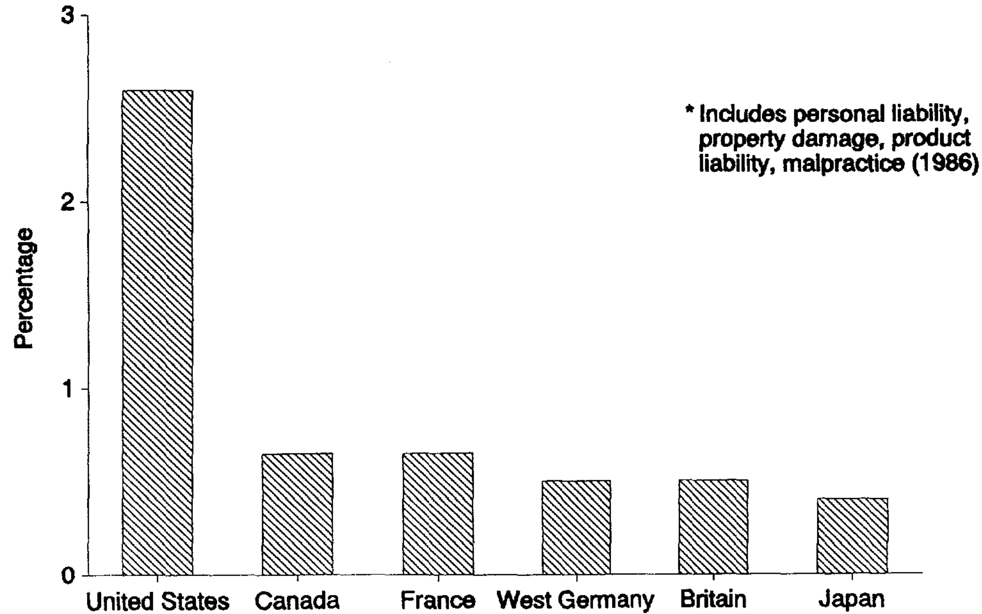
No society spends as much on bureaucracy. No society produces as much paper per health transaction. We have been adding about four white collars to the health care system for every white coat we've been adding. Himmelstein in the *New England Journal of Medicine* estimates now that about 24% of American health care costs is the cost of bureaucracy. That compares to 11% in Canada. He estimates that in the United States for the last five years the bureaucracy costs have increased 187% whereas in Canada they actually went down. Nobody looks at this system.

When I look at the difference between Canada and the United States, for instance, or this also applies to Germany and it also applies to a number of other nations, there are three big areas which differentiate the United States' system. Number one is malpractice. Number two is the cost of bureaucracy and number three is a more intensive use of technology, but this is certainly one of the big ones.

No nation has its variations between regions for the same procedure. The chance of a woman having her uterus at the age of 70 varies seven times from one part of Vermont to the other part of Vermont. There are regional discrepancies or variations in tonsillectomies, prostate operations, hysterectomies, those type of operations, all

CHART 3

Ratio of Tort Costs* to Gross Domestic Product



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age adjusted and no reason in the world that anybody has justified as to why you have these incredible variations. The Rand Corporation, looking at unnecessary operations, simply says a whole chunk of what we do could be safely eliminated. Dr. Bob Brook, Deputy Director of the Rand Corporation, estimates that 40% of coronary bypass operations, 33% of carotid artery surgeries, and 25% of endoscopies are medically unnecessary. Simply put we just don't damn need them and the waste that engenders in the system is something that, again, is just absolutely incredible.

No nation has as entrepreneurial a health care system. Now that's not a dirty word with me. Entrepreneurial is what runs America, but when it gets into the health care system it seems to go amuck. The *New England Journal of Medicine* states that doctors who own or invest in laboratories prescribe three or four times more clinical services for Medicare patients. It's absolutely outrageous and this, of course, is part of the entrepreneurial attitude of American health care.

Now I believe that there is no alternative, that even if we increase the efficiency of the American health care system we still haven't solved the problem that we have. That even if we do everything that people are suggesting, even if we reform the tort law, even if we stop training so many doctors and lawyers, even if we close hospitals, close hospital beds, regionalize some high-technology medicine, even if we maximize generic drugs, and tax cigarettes and alcohol, and form hospices, and promote immunization, and push for a smoke-free society, pass living will legislation, use no code, license paraprofessionals, even if we did all of those things that people are saying are partial answers to the health care system, it is my thesis we're going to have to develop some sort of ethic of restraint, some concept of appropriate care or cost-effective medicine.

Let me say the more that I get into health care, as I'm sure happens to you, too, the more I realize what I don't know and how humbling it is. Each of the 12 years that I was Governor, I asked the legislature to increase the cigarette tax. I hate what cigarettes do to people. There are now three studies, however, showing that the lifetime health care costs of smokers are substantially lower than the lifetime health care costs of nonsmokers. Again, I suspect most of the people in this audience know that, but it sure came as a shock to me, absolutely a shock. It makes sense, of course. I mean you know when you smoke generally your first or second major health episode is your last. The genius of medicine is such that for most of us who are nonsmokers we're saved from one disease to be thrown into the arms of another disease and saved from that one to be thrown in the arms of yet another disease and on and on it goes. That's not an unhappy scenario. I mean that really allows us to see our grandchildren and live some extra years of quality life.

The big issue, by the way, one of the most intriguing things, is to what degree these extra years we've been gaining are years of disability and to what degree these are functioning years. You know it's the Freeze's Study. Freeze argued that we were going toward a system like the Horshay where we're going to live for 100 years and then die quickly. I believe that the best empirical evidence now is that that is not happening. That actually we're getting more years of dysfunctional life than we are years of functional life due to some of our technologies. Anyway I do believe that when you look at other societies, other societies ask this very basic question. How do we get the most health for our people from the money we have to spend? They

don't ask how to get the most health care. They ask, "how do we get the most health? What strategies?" And I think that's a very important concept. I mean I would rather have a dollar-a-pack tax on cigarettes here in Colorado than I would a large amount of money put into the health care system. Am I contradicting myself? Well, maybe. I think that when you look at the costs of cigarette smoking, even with the lifetime costs of health care, that would be an important thing to do just for your society. You give me some of the empty hospital beds here in Colorado Springs to lock up drunk drivers, and I'll save more lives than the hospitals will. But nobody asks in the United States, how do we take our resources and buy the most health for our people? Well, I believe there's a new world of health care coming and this is my formula.

In a world of limited resources the explicit decision to pay for one procedure for one group of individuals is an implicit decision not to pay for another procedure for another group of individuals. As the theologian, Harvey Cox says, "Not to decide is to decide." I mean when we decide to spend "A" amount of money on "B" procedure, that, in effect, is a decision not to spend "Y" amount of money on "Z" procedure. So there's a new world of tradeoffs, I believe, in American medicine that we simply have to be mature enough to confront. It's preventive medicine versus curative medicine. It is improved quality of life versus extension of life. It is spending on young versus old. It is high-cost procedures for a few versus low-cost procedures for many. It is high-technology medicine versus basic health care, and it is health care versus other social needs that we have to do in this society. There are lots of things that we don't do in this society as you know.

Now how do we find the money to do them within the existing dollars? Victor Fuchs says when you start spending money in health care you buy a lot of health. When you're vaccinating kids, when you're giving prenatal care to pregnant women, when you're doing basic health care, that is very cost effective. But he says in American medicine, you get to where you're spending a lot of money for a very marginal return. This is where you've giving chemotherapy to 85-year-olds with metastatic cancer. This is where you're doing all of those other things that are so marginal that it has to be futile. This is where you're spending. This is where a court orders an insurance company to give a bone marrow transplant because somebody has one chance in 1,000 and the court just can't take the heat to say no. There is a whole range of things that we do that other societies have the maturity not to do. They don't pretend that they can take every dollar and spend it because a life is at stake. We don't in this society.

The last year that I was Governor we had 101 planes crash in Colorado. Most of them crashed in our mountains. Well, now what do I do? Do I say, well, we should spend every cent possible because a life is at stake? You just don't do that. You do your best. You get a very good civil air patrol. You try your best to find them, but you don't drop everything else and spend any amount of money because a life is at stake. What you do is you balance the goal to be achieved with the resources you're spending toward that goal. Now this offends a lot of doctors because they've been brought up thinking you can give all the medicine that is beneficial to every patient who is in front of them. Again, Victor Fuchs says the desire of the engineer to build the best bridge or the physician to practice in the best equipped hospital is understandable, but to the extent that a monotechnic person fails to recognize the claims of

competing units or the divergence of his or her priorities from those of other people, his advice is likely to be a poor guide to social policy. I can't tell you how this speaks to me. Again, of course, doctors are going to want everything in every hospital. I mean we've got this 7-11 theory of hospitals in the United States. We want a hospital on every corner available at every moment of the day and night but, hell, that's what's running up the costs in America. Sure the doctors who practice there want a new MRI machine because the people across the street have one. But does it make sense to our society to do that? It does not often.

I came back from a trip looking at other health care systems with the thesis that all societies ration medicine. There's not one that doesn't ration medicine. There is much more medicine out there than we can pay for. We ration it by price. In England, and in a number of other societies, they ration it by queuing. The philosophers talk possibly about chance. Let's say you had one organ and five people who needed an organ. You would draw straws for that or something, or use some sort of prioritization of the kind that Oregon is now experimenting with. When you get into this and you see what other societies do, you find that the devil is always in the detail. Everybody that I could find uses these yardsticks in one form or another. We all want to live a long time and we all want to have a high quality of life. But when we apply these yardsticks to compare it's easy to say we're not going to give transplants until we give all prenatal care, but it soon gets into a moral accounting of unbelievable difficulty. So in ending I would say we are the only society that expects that we can have it all. That the bottom line here that's driving American health care costs is this attitude that somehow we believe one of the rights of being an American is we can have unlimited health care and the national expectations are driving a lot of our health care.

Okay, I believe the search then is for appropriate care. Well, if you can't pay for everything what can you pay for and what yardsticks do you use? And so everybody's looking at what the basic health package is or what appropriate care is. Rand Corporation said it this way: "Where the expected health benefit (i.e., the increased life expectancy, relief of pain, reduction and anxiety, improvement in functional capacity) exceeds the expected negative consequence (i.e., mortality, morbidity, anxiety, pain) by a sufficiently wide margin, the procedure was worth doing." Now I don't claim this solves the problem. All this does, however, is try to put some additional yardsticks to those previous yardsticks. Do we do this already? Well, I suggest that we do.

I went around Colorado and looked at where Colorado's doctors do not give angiography to people who arguably benefit from it even though they are at the margin. We found that they don't give angiography to patients with dementia, patients with cancer under active treatment, or some patients with some other coexisting illness that severely impairs the short-term life expectancy. So, again, we already started down this road to some degree. It's inevitable. You can't not start down this road. You have to decide what procedures we are doing right now that are so marginal as not to be worth doing.

Now in Oregon, Colby Howard, age seven, died because he did not get a transplant, and this was fraught with bad publicity and here's my frustration. The same year that Oregon was deciding not to pay for transplants and starting down this road,

California voted to pay for transplants. Okay, it didn't want that heat. As Charlie Brown says, "There's no issue too big you can't run away from." So California legislators voted to pay for transplants. Then one week later they knocked 270,000 low-income people off of Medicare. There are now three studies that show what happened to those 270,000 people. Which state killed the most people? Well, it wasn't Oregon. California had seven excess deaths out of 196 patients just in the hypertensives. Three studies found that California, obviously, killed far more people by taking 270,000 people off of the roles than Oregon did by saying it was not going to pay for transplants until it gave everybody prenatal care.

Our American poet laureate says, "Praise without end the go-ahead zeal of whoever it was that invented the wheel, but never a word for the poor soul's sake who thought ahead and invented the brake." I believe that the dilemma we're faced with is in a way a success story. I mean let me put it in perspective. This isn't the most terrible thing that's ever happened to a society. After all, there are women saved, like my wife, who would have died in previous years. There are people walking around with artificial hips who are able now to play with their grandchildren. I mean this is not necessarily a terrible story, but it is becoming an economic cancer. The total amount of money we're spending on health care is becoming an economic cancer that is interfering with other important things that we have to do if we're going to leave our children a society worth running. I believe somewhere along the line we have to invent a brake.