

Our system for providing health care in this country is in deep trouble. It is not really a system at all; it is a “nonsystem,” a disorganized hodgepodge of ad hoc arrangements for the delivery and payment of medical care, which, in response to innumerable conflicting private and public interests, have simply accumulated over the past half century without any overall plan or direction.

It is, in short, a typically American institution, as American as apple pie. But it isn’t serving our needs very well anymore. In fact, it has become a major social and economic burden on the country, which is now demanding correction.

The problem does not lie with our unexcelled medical science and technology, nor with the technical competence of our medical personnel. The problem is the way we provide and pay for medical care.

American biomedical scientists have won more Nobel Prizes than all their colleagues in the rest of the world combined, but the American health care nonsystem would win no awards. Judged by its ability to meet social needs, our system suffers seriously by comparison with those of many other advanced Western countries.

We are failing to provide decent care for a large and growing fraction of our citizens because we simply cannot afford the increased cost. Medical care has become monstrously expensive, and its cost continues to rise at an absolutely insupportable rate.

Waste, inappropriate and inefficient use of services and resources, inequity, and excessive administrative overhead are seen at every turn. These problems have been obvious for many years, and suggestions for major reform have been made many times before. But now, with the election of a new president who is committed to health care reform, with mounting public clamor for change, and with the congressional leadership on both sides of the aisle declaring themselves ready for enactment of new health care legislation, we seem to have come at last to a true crossroads in our national journey toward health care reform.

We cannot stay where we are. We must move, but in which direction? What do we do?

A spate of proposals has recently been introduced in the Congress, and many more have been debated in the public arena, but until now there’s been no sign of coalescence around any one of them. However, there seems to be agreement on the general goals. We want medical care for all our citizens, at a cost we can afford, in an accountable system that promotes quality and efficiency, encourages innovation, and allows for some freedom of choice.

That’s a tall order. Many believe it is unrealistic, not attainable in the foreseeable future, if ever. I disagree. I believe that if the richest country in the world can afford to devote 14 or 15 percent of its economy to health care, it can certainly have a system second to none, with all the desired characteristics—provided we recognize what needs to be done, and are willing to do it.

By
Dr. Arnold S.
Relman

Medical Care Reform: Building a Viable System

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Delivery System: the Heart of the Problem

First we must identify the basic causes of our problem. We cannot set the system right until we understand what is wrong, and how it got that way. Most discussions of health care reform have focused on the payment side of the system, particularly on funding and on medical insurance.

That's understandable, because the insurance system is seriously flawed and in urgent need of reform. But reform of insurance cannot do the job by itself; it does not go to the heart of the problem, which is to be found in the medical care delivery system.

Current legislative proposals, in my opinion, pay insufficient attention to the delivery system, yet that is where the ultimate success of efforts at health care reform will be decided. The main thrust of my comments will be concerned with the delivery of medical care.

Physicians' Role in Medical Cost Crisis

The medical care system is in essence a reflection of how physicians practice their profession. That may sound like a physician's parochial conceit, but a moment's reflection may convince you otherwise.

Physicians are paid only 19 or 20 cents of the health care dollar in America, but their decisions and advice largely determine how most of the rest is spent. Physicians order the tests and the procedures, they command the use of hospitals and nursing homes and outpatient facilities, they prescribe the drugs and recommend the use of medical goods of all kinds.

Of course, all of this is usually done with the consent of patients, and sometimes even at their request; but the fact

remains that most medical care, unlike most other services, is not independently selected at the discretion of the recipient.

Furthermore, considerations of service price, which are so important in most other kinds of choices made by consumers in our economy, are much less constraining in medical care, because three-quarters of the cost is paid by third parties.

Quality is not much of a consideration either, because patients are rarely able to determine in advance the quality of the medical services they will receive. And even if they could, few would want anything less than the best available.

I cannot imagine a patient walking into a surgeon's office and saying, "Doctor, just give me the standard, low-cost operation. I don't want the top of the line."

In sum, patients are not consumers in the usual sense, and the market for medical care, if you want to call it a market, is not like the markets for most economic goods and services. People can shop for medical insurance, but not for their personal medical services.

I'm not suggesting that patients cannot or should not participate in decisions about their care. They often can, and, if they wish, they should be given all possible information to help them do that.

But most people who are ill, or fear they are ill, want and need to depend on their physician—and it's primarily the physician who decides what will be done, based on his or her assessment of the particular situation.

However, with relatively few exceptions, there is much room for differing medical judgments on what ought to be done in any given situation. Despite the recent enthusiasm for "practice guidelines," most of the day-to-day practice of medicine cannot now, and probably never will, be reduced to rigid algorithms.

In short, while consumer choice of medical services is limited, physician choice is not. The options open to the physician for the use of medical resources are often very wide, and they may have widely varying price tags. There is hardly any place in the practice of medicine where properly informed and motivated physicians could not effect tremendous savings and reduce the rate of medical cost inflation by making certain choices and not others-without risking the patient's welfare, and in the process often improving the quality of care.

I conclude that the most important proximate cause of our medical cost crisis is the behavior of our physicians. In doing so, I do not suggest that doctors are more greedy or venal than other mortals; they are not. In fact, I believe they are probably less inclined to put their own economic interests above their clients' welfare than are many other professional providers of specialized services in our economy.

But doctors are human, and like other humans they respond to externalities. Their behavior is influenced by how they are paid, how their practices are organized, how they are trained, and how they are buffeted by the economic and social forces now dominating the delivery of medical care.

Most physicians are paid on a piecework basis. The more tests, procedures and service they prescribe and provide, the more money they're likely to make. Most physicians practice alone, or with one or two associates, in private offices where there is little or no professional accountability or peer review.

Most physicians are specialists and are trained to provide an expensive, technology-intensive kind of medical care. They are also trained to do everything that might possibly help the patient, with

little or no regard for the flattening of the cost-benefit curve.

This behavior is reinforced by the expectations of patients, who want no expense spared if there is any chance of benefit, particularly if they're insured or if they know somebody else will pay.

Physicians also face an increasingly competitive professional environment. The number of practicing physicians, most of them specialists, continues to grow far more rapidly than the population, and the number of available insured patients continues to diminish.

Commercialization of Health Care

Physician behavior is also greatly influenced by the vast commercialization of the medical care system that has occurred in the past few decades. I estimate that approximately a third or more of all medical services in this country are now provided by investor-owned facilities.

Competition, overbuilding, the duplication of facilities, and the still largely open-ended funding of the health care system drive these providers to expand their revenues. But entrepreneurialism is also rampant in the private, voluntary sector, where there are the same economic imperatives to generate maximum business in an increasingly threatening and competitive environment.

Advertising and marketing are widely employed by all kinds of facilities, investor-owned or not, and also by doctors in private practice. The advertising by the hospitals and the health care facilities has as its primary target the practicing physicians, who are encouraged to refer their insured patients and use the facilities maximally.

Physicians are also invited to become investors in goods, services and facilities, with very attractive opportunities for income, with the obvious purpose of generating still more referrals and more rev-

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enue for the providers. Probably 10 or 15 percent of all physicians are now involved in such so-called "self-referral" arrangements; in places like Florida and California, the hothouses of medical entrepreneurialism, the number may be as high as 40 percent.

All of these considerations, added to the lack of the usual constraints on the consumers of medical care, inevitably drive today's practitioners to do more for their patients even when less might be enough, to use resources lavishly when a more prudent use of resources might be appropriate.

Revolt of the Payers

Years of double-digit medical inflation have finally produced what might be called "the revolt of the payers," an effort by the third-party payers to contain costs rather than simply pay the bill.

Government adopted prospective payment-DRGs (Diagnosis Related Groups)—for hospitals, and a fee scale for paying doctors. DRGs have at least temporarily slowed the cost increase in Part A of Medicare, but have also caused hospitals to shift more of the burden to the private insurers, because the DRGs pay hospitals less than their costs.

The long-term effects of physician payment reform remain to be seen, but control of the volume of physician services is still an unsolved problem. I read in the *Washington Post* today that total expenses for Medicare are expected to go up by another \$21 billion this year, so it's clear that whatever methods for cost control have been used so far by the government in the Medicare sector have not been entirely successful.

Private insurers, for their part, have relied largely on what has come to be known as "managed care" to control their costs, mainly through various kinds of utilization review. Judging from the continued escalation of private insurance

premiums, the net effect on costs so far has not been very impressive. Furthermore, third-party payers are not well equipped to micromanage the practice of medicine. When they attempt to manage care, they have only blunt instruments at their disposal, and they concentrate on costs rather than the complexities and subtleties of personal medical care. The result is unwelcome and intrusive interference with the professional responsibilities of physicians, and an increasing degree of administrative hassle and overhead that has angered and frustrated most physicians.

In my almost 45 years of being a physician, I cannot remember a time when practicing physicians were so angry at, and demoralized by, what they consider to be unreasonable bureaucratic intrusion into the practice of medicine.

And yet, there is no doubt that the medical care delivery system needs management; without it, costs will continue to spiral out of control. The question is not whether we need management of the medical care delivery system. The question is, who should do the managing, and how? Neither insurance companies nor the increasing army of profit-making, utilization review companies that are now being hired by the insurance companies are qualified to do the kind of management that's needed.

I submit that those closest to the patients, those responsible for the medical decisions, should do the managing. Only physicians in close touch with their patients are in a position to know how to use medical resources cost-effectively, with appropriate concern for the welfare of each patient.

I believe the best way to reform the delivery system is to put the direct responsibility for cost control on physicians, by requiring them to live within a fixed, per-capita budget. That easily translates to a national budget, if you

want to think of it as a way of national cost control. To make it possible for physicians to take appropriate responsibility for cost control, we must change the circumstances that have determined their behavior until now.

Competitive HMOs

Doctors of the future will be practicing responsible, accountable, cost-effective care in group model HMOs (Health Maintenance Organizations)--private, not-for-profit, cooperative or membership-owned HMOs, with open enrollment.

HMOs should be paid on a capitation basis, and they should compete, not, as some would have it, on the basis of price, but on the basis of quality. The price should be fixed nationally, with appropriate regional and local variations—according to economic conditions and the severity mix of patients, etc.—and with appropriate re-insurance protection against the occasional outlier, which could be a disaster for a small group.

As I've said, these HMOs should compete for patients, and for doctors to work in them, on the basis of quality, not price. Physicians who work in these HMOs should be paid salaries--no bonuses, no incentives for doing more or doing less. They should be paid fair, competitive salaries, based on the assumption that physicians in such organizations, as a group, should receive approximately the same fraction of the health care dollar that they do now, after practice expenses.

The distribution of that money should be a matter of self-administration by the doctors. Let each group of doctors--given a fixed, lump-sum of money, which represents an agreed-upon percentage of the total premiums paid into the group or paid into the system as a whole--manage themselves, set their own salaries, decide how much more

they think their neurosurgeon is worth than their primary care practitioners, and so on.

Impossible, you say? A pipe dream? Not at all. I've seen it happening, very successfully, in several places around the country.

An arrangement like that enables physicians to act as the fiduciaries they ought to be—as the purchasing agents for patients, staying apart from an increasingly entrepreneurial, market-oriented system, which up until now has drawn the physicians in.

A system like this enables physicians to do what they were trained to do when they were students and residents, to do the right thing in the best interests of their patients, and to act as discriminating purchasing agents for their patients, dealing with the medical-industrial complex and all the new products and the expensive new drugs and tests.

They will be expected to live within a fixed budget, and their professional income will be limited to their salary. I think it should be made illegal for physicians to make money by self-referral arrangements.

I applaud Rep. Stark for his original bill, which dealt with self-referral to diagnostic laboratories. It only covered Medicare, but I believe that this principle should be applied across the board to all physicians and all self-referral and self-dealing arrangements. It may surprise you to know that, in my opinion, the majority of American physicians agree on that score. Currently the American Medical Association and other major groups, such as the American College of Physicians and the American College of Surgeons, support that idea.

The arrangements I am advocating promote professional standards, accountability, and also the appropriate use of medical manpower. Well-organized HMOs use medical manpower efficient-

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ly. They use no more than the necessary number of physicians per number of patients covered, which is substantially less than the number of physicians we have in the country today, and they use at least 50 percent—sometimes more—of their physician fulltime equivalents in primary care. In contrast, the health care system at the present time is gradually changing to a mix of 80 percent specialty, 20 percent primary care.

When I started out in medicine, it was just about the reverse: in the last 40 years we've seen this enormous increase in specialists.

Now, I am not a Luddite. My academic career was based on specialized medicine, research, and developing and applying all kinds of new, expensive techniques. I believe specialization is necessary for continued innovation and improvement in the medical care system, but it's out of control. We don't need all the specialized care and all the specialists we have now.

Reforming Medical Care Funding

In order to put all this into effect, we will need major reform of the payment and the insurance side. We can't get changes in the health delivery system without major changes in the funding of medical care, and the way insurance works.

I believe we ultimately will need a universal insurance system, providing standard benefits in approved, accountable, not-for-profit HMOs, with some kind of semipublic oversight. We will need a discrete, earmarked medical care fund, supported by a universal health tax, to pay for personal care, research and education, and preventive care.

The American health care system depends on a flourishing, vital, innovative research and educational establishment. That establishment has to be identified, it should be supported through the

general medical care fund, and it has to be accountable for what it does with its money. I believe there would be plenty of money in such a universal fund to do that, as well as to pay for the increased amount of preventive care we need.

Everyone should be in the system but free to pay for additional benefits outside. Everyone should be financially responsible, according to their means, for paying into the system. Ultimately, we'll have to break the link between employment and health insurance. We can't do it abruptly, but the amount of money that employers are now putting into the health care benefits of their workers ought to be paid as increases in taxable salary, which then the employees would use to pay taxes into the medical fund.

Steps We Can Take Now

Now, I admit, the Clinton administration is not going to put forward this proposal in the next 100 days, and even if it did it would be dead on arrival in the Congress. Nonetheless, we ought to start thinking in these terms.

What can we do in the meanwhile to control costs and move toward universal coverage? There are many things being considered that might be politically possible. For example:

- We should increase "pay or play," making it more attractive for small employers by reforming the small insurance market. If we want to raise some tax revenue, maybe we can cap the tax deductibility of employers' premiums.
- To get universal coverage as quickly as possible, we should expand eligibility for Medicaid. It is unconscionable that in many states in this country a person income has to be less than half the poverty level before he or she is eligible for health insurance.

- As quickly as possible we ought to move Medicaid and Medicare and employment-based insurance toward HMOs. Furthermore, we need policies that will encourage and support the formation of HMOs.
- We should start right away to reform the medical manpower situation. We are producing physicians, most of them specialists, at a rate our system cannot absorb. The more physicians we produce per population, the more money we're going to spend. Government and academic institutions and teaching hospitals should face the fact that we need a fair and reasonable method of controlling the output of total doctors, and shifting the balance from too many specialists to more primary care physicians.
- We should establish mechanisms for increased technology assessment, and reporting of outcomes. Without that, we are the helpless captives of an explosion of expensive, glittering technology that's been inadequately evaluated. We need to reduce the vast area of grey uncertainty which the marketers and the advertisers exploit, and focus in on those new technologies that are truly cost-effective and worth the money.

A simple example: Right now the Food and Drug Administration is required by law to require pharmaceutical companies requesting approval of a new drug to submit evidence of effectiveness and safety. But there is no requirement that the company also submit comparative evidence on the relative cost-effectiveness of their new product with respect to existing products that may be much cheaper. That kind of information, if it comes out at all, is available much later, after the marketing blitz, and after an enormous amount of money has been spent.

Establishing multispecialty groups is an ideal way to improve the reporting of outcomes." Uniform reporting, group responsibility, peer review, and internal education would make the practice of medicine far more interesting and rewarding to those in these practices, and would quickly generate a vast amount of information, which we are not currently getting out of our fragmented, solo practice, private office based system.

- And, finally, if we want to effect major social change for the public good, we must educate the public to understand why it is in their interest, economically and medically. We are, all of us, paying that huge bill—this year it will be \$940 or \$950 billion--and we're paying for it in a crazy, disorganized, indirect, inequitable, and uncontrollable way. And furthermore, we're probably paying at least \$200 billion--maybe \$250 billion--more than we would need to pay if we had an efficient, rational, responsible system.

We need to tell people you can't get anything for free. If you want decent medical care, there is a way to give you the best available care at the lowest possible price, and put you in charge. You will have to decide ultimately how much you want to pay for insurance that will do this, but you can be assured you will see where the money goes.

The money will be earmarked. It will not be lost in the general government funds, it will not be subject to a year to year manipulation by the Congress. It has to be an earmarked, separate fund which people pay into and which is used for the purposes described.

I believe that, with appropriate education and with some courageous political leadership, the people will

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agree, because it's in their best interests, and I believe the medical profession will agree, because ultimately it's in their best interest.

Certainly it's in the best interest of young physicians who are starting out. Most young physicians are aware that the times are changing. They're anguished about their own futures as independent and respected professionals, and they want to practice good medicine. Yes, they want to make a decent living, but they want to feel they're doing good, that they're going to be respected by their colleagues, and that their patients will appreciate what they do.

Consult the Physicians

I want to make one final point, which has to do with the newly appointed Presidential Task Force on Health Care Reform. It is made up of very distinguished people, and headed by Hillary Rodham Clinton—but not one of them has had any experience in the delivery of health care, not one has lived in the health care system, not one is a physician. Now, obviously, health care reform is a public responsibility and a political responsibility, but if you're going to change a system that depends on how doctors behave, you'd better consult with them.

Trying to reform the health care system without bringing the doctors to the table is like trying to win a football game with coaches alone, without any players. You can have very smart economists and planners and politicians, but if the players, the people who deliver the health care, are not going to be involved, it won't work. When I'm sick, I don't want to be taken care of by a doctor who's angry and dispirited and demoralized and can't wait to get out of his practice.

I think we have to recognize that the new system—whatever it ends up being—won't work unless the delivery system works well, unless doctor-s are brought into the system and rewarded for doing the right thing.



Q *You made the point that doctors are only paid 19 or 20 cents on the health care dollar, but they probably determine about 98 percent of the medical decisions. If in fact that's the case, why do you turn over to the government, to somebody other than doctors, the determination as to what services ought to be provided to whom, and at what prices?*

Because the present system in which doctors practice forces them to make socially bad decisions. The economic incentives are wrong.

Q *I understand the notion of having a budget and of caviating, and I also agree with you that the current system rewards doing more, and in fact a significant amount of unnecessary kinds of things. What I don't understand is why you're not prepared to allow the capitated physician or physicians to innovate, introduce prevention, figure out ways to negotiate with the hospitals, figure out ways to negotiate with the subspecialists, to reduce those costs, and in fact to be able to profit in that.*

That is, why there can't be an economic incentive for delivering a better product, as opposed to being salaried?

The answer to your question is, you can't quantify quality very effectively. Furthermore, I don't believe it's necessary. My

reading of the mood of young American physicians is that they don't want to be businessmen, they don't want to figure out how to make more money. They want to make a decent living, they want to get good fringe benefits, they want to be proud of the care that they give, they want to be well thought of by their colleagues. I don't believe that doctors have to be given an economic incentive to be efficient and creative.

We did very well--there was plenty of creativity and plenty of commitment--before health care was turned into an industry.

Q You've spoken very eloquently of what's wrong with the system that delivers medical care to sick people. Could you give us some view of what you think is the appropriate role for physicians and medical educators and researchers in preventing disease? And do you think that some of the current problem is due to the current medical infrastructure focusing on disease treatment instead of its prevention, and the promotion of public health?

I think you have to make a distinction between medical care and health care. Medical care is what I've been talking about. Health care is concerned with protecting and promoting the public health. It requires many other kinds of interventions, and goes far beyond what doctors and hospitals and nurses and technicians can do.

A large amount of the pathology that brings people to hospitals and doctors' offices is social pathology--gunshot wounds, drug abuse, alcoholism, violence. That's why it's so easy to point out the tremendous disparity between the enormous amount of money we invest in medical care and many of the common measurements of public health, which show us to be not advanced at all.

We spend more money on medical care than anybody else, but our infant mortality and our longevity and immunizations and so on are not very much to write home about, and that's because these things require social and political action.

If we spent more money on education, reconstructing our inner cities and our poor rural neighborhoods, and so on and so forth, would that give some relief to the medical care system? Would it reduce some of the expense? That's a complicated question, and although much has been written about it, I'm not sure we know the answer.

Obviously we have to commit ourselves to prevention, because at the very least, whether we save money or not, we are certainly improving quality of life. Whether it really would add significantly to the solution of our health care cost problem, I don't know.

Q You hinted that the public might accept access to health care through prepaid systems, HMOs in particular. Do you envision the medical profession--young physicians, men and women--accepting employment through HMOs? Without them, you don't have a system.

Yes, I can easily imagine young physicians doing that, because the alternative isn't very attractive. Remember, the alternatives are closing down, and the fact of the matter is that more and more young physicians are joining groups and are taking salaried positions.

Of course, it's a generational thing--the older physicians are not, but it's happening with younger physicians.

I also want to make a point I didn't have a chance to discuss. The system that I'm describing should be the system that is subsidized by the medical care fund. It should not be required for everybody, as

long as they contribute their share of the tax.

It should be like public education. You have to pay for it, but if you don't want to use it, and you want to spend your own money to send your kids to a private school, that's your option.

I think the publicly subsidized system ought to allow point of service options, so, for example, you can supplement your payments into the system if you want to go see some famous consultant when you have a tough problem. Or if you don't want to be taken care of by that system at all and you want to buy your own indemnification insurance—and you can afford the \$20,000 or \$30,000 a year that a family policy might cost—fine. I think people ought to be allowed to do that.

I'm not at all afraid of a two-tiered system developing, because only about 5 percent of the country will be able to afford private insurance. Most of us will be in the system that is publicly subsidized, and most doctors will be in the system, and most of us will have a major stake in seeing that it works properly.

Q In your remarks you mentioned you have seen systems that are working. By that did you mean there are individual HMOs, perhaps non-profit HMOs, that are managed well? Or are there systems outside this country similar to what you're recommending?

I've done a lot of traveling during this last year and I've looked at many HMOs, of all kinds—ones that are successful and ones that are not. In my judgment, from the point of view of the quality of the care, patient satisfaction, doctor satisfaction, and cost, there are indeed successful HMOs which meet all the criteria.

What about other countries? Look at Canada. Canada does many things right that we can't do. It takes care of every-

body, it covers all necessary costs, and so far Canada isn't going broke from health care, although we should note that in the last couple of years their costs are escalating almost as rapidly as ours.

Canada's system has features I think we can learn from. One is that they have a single payer, and a very efficient insurance system. Their overhead costs are minuscule compared to the terrible overhead costs that we pay for private insurance.

Doctors in Canada aren't hassled with insurance forms. They fill out a form after they've seen a patient and at the end of the month they get paid automatically. The trouble is that the Canadian system doesn't control the volume of services, it controls only the price. Because it doesn't control the volume, it ratchets down the price to keep doctor payments within limits; so the doctors run faster and faster and faster to maintain their revenues.

Furthermore, the Canadians haven't seen fit, or aren't able, to invest as much in health care as we can, so they don't have as many facilities. Thus, there are queues for some things—greatly exaggerated, in my opinion, but nevertheless real.

Q The cost of dying is rising faster than the cost of living. I understand some substantial fraction of medical care cost is in the last year of life. Would you comment on whether this is an area where, from a cost-containment point of view, we need to do something?

Most people die slowly, and they get sick before they die, and they need a great deal of attention, so it's not surprising that we should spend a lot of money as chronic diseases progress.

The question is, is it being spent needlessly, clearly with no expectation of any

benefit'? I'm i~urc some is. Maybe a lot is. If you make rounds on the intensive care units of most of our teaching hospitals, or you make rounds in neonatal intensive care units, you see hopeless, moribund patients being kept alive for various reasons.

There is money being wasted. How much, and how it impacts on the overall cost of health care, I don't know. But I do know that if you had a rational system that was not driving to keep the intensive care units full and increase hospital revenues, and if doctors weren't being paid on a piecework basis, you'd have doctors with families and patients asking the relevant questions: What makes medical sense, what makes ethical and personal sense'?

Q Given the high cost of medical education, which students choosing specialties must take into account, and the strong emphasis you mentioned on new high-technology medicine practiced by specialists, what sort of institutional and financial programs do you envision to change the balance of primary care physicians to specialists?

Students, in debt, come out of medical school, finish their residency, and look at what's going on out there. They see that if they become a radiologist or a procedure-oriented neurologist or a neurosurgeon or ophthalmologist, they can work a 40-hour week and make three or four times as much money as their colleague who chooses to be a family practitioner or a general internist, who is working long hours, is on call all the time, and is fighting to make a decent living. Why would they want to go into primary care?

So we have to make some major changes. First, we have to change that disparity. I think if you made primary care more rewarding, and the disparities

much less, more people would choose primary care, particularly if they practice in groups. One of the really dispiriting and dismaying things about a lot of primary care is that you're alone. You're alone with uncertainty and multiple problems. You wish you could talk to colleagues, and you wish you had easy access to consultants—that's what you get in a group.

We have to recruit people in medical schools who are interested in primary care, and we have to reduce the burden of the cost of medical education, with loans and scholarships and grants, to attract them into primary care.

Q How will this new approach affect the amount of money spent on medical research? Also, do you foresee a shift of emphasis in research--e.g., perhaps less emphasis on extremely sophisticated diagnostic methods, and more of an emphasis on more effective and lower cost health care delivery?

I am not suggesting any lower priority for medical research. On the contrary, I believe we ought to invest more in medical research, because it pays off. There's plenty of money in the system. We're going to spend \$950 billion for health care this year; we definitely can afford to give medical research and teaching hospitals and education the \$20 billion or so they will require.

We as a nation are so rich. If we were as rational as we are rich, we could have just the kind of health care system we want.

As for a shift in emphasis in research, the main issue is to determine what's effective and what isn't. If very expensive, very sophisticated technology can do a significantly better job, then we should use it. I believe we can afford all

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the diagnostic technology we need if we use it rationally.

Let's take MRI (magnetic resonance imaging), for example. We're probably spending more than \$10 billion a year on MRI. I know there are places in this country where a patient comes in to see a general practitioner and says, "Doctor, I've got a bad headache." The doctor replies, "Well, who knows, you might have a brain tumor. Let's order an MRI." Any good physician knows that's irrational.

However, we can afford the rational use of MRI and any other sophisticated technology that significantly improves the diagnosis or treatment of disease.

Q Would you discuss the present medical delivery system, rural versus urban, and what impact your proposal will have on that?"

There was a study published recently in *The New England Journal of Medicine*, which pointed out that the demography of the country is such that you could not have three competing HMOs in one third of the country, because the population isn't dense enough. So "managed competition," in the sense of having competing HMOs, wouldn't be applicable in many rural areas. But you certainly could have one HMO, and I have seen a couple of very impressive examples of well-organized, not-for-profit HMOs which have outreach programs in the rural areas.

They have a clinic in small towns and in rural areas, staffed by members of the HMO—usually there's one internist, one pediatrician and one family practitioner, and a nurse or two, and a simple diagnostic laboratory, backed up by circuit rider specialists who come out to deal with elective problems. Rapid transportation into the central facility is available when hospital care or tertiary speciality services are needed.

It works beautifully, it keeps costs down, it provides much better care than most of these communities had before, and it keeps the doctors happy, too. They don't feel isolated, they don't feel alone, they can enjoy the skiing and the fishing, and still stay in contact with their colleagues.