

**BETTER HEALTH CARE FOR RURAL AMERICA**

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**HEARING**  
BEFORE THE  
**JOINT ECONOMIC COMMITTEE**  
**CONGRESS OF THE UNITED STATES**  
ONE HUNDRED FIRST CONGRESS  
FIRST SESSION

DECEMBER 13, 1989

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WEDNESDAY, DECEMBER 13, 1989

CONGRESS OF THE UNITED STATES,  
JOINT ECONOMIC COMMITTEE,  
*Washington, DC.*

The committee met, pursuant to notice, at 10 a.m., in room 2359, Rayburn House Office Building, Hon. Lee H. Hamilton (chairman of the committee) presiding.

Present: Representatives Hamilton, Obey, and Upton.

Also present: David Podoff and John Mizroch, professional staff members.

## OPENING STATEMENT OF REPRESENTATIVE HAMILTON, CHAIRMAN

Representative HAMILTON. The Joint Economic Committee will come to order.

This morning, we will examine the condition of health care services in rural America.

Part of the concern with the current condition of rural America has been a fear that access to quality health care in rural areas is becoming harder. Since 1980, over 200 rural hospitals have closed, and another fifth of the remaining 2,500 rural hospitals are at risk of closing.

There are a number of dimensions to the health care problem in rural areas. Today, we will look at several themes.

First, what type of health care services should be available to rural residents?

Second, what type of facilities should be used to provide these services?

Third, how can health care professionals be attracted to rural areas, and how will their salaries be financed?

Fourth, what is the role of the Federal Government in ensuring access to health care?

And, finally, what should be done in terms of health care policy to help facilitate rural America making an economic transition to face the requirements of the next century?

The committee is very pleased to have with us three experts on rural health care; Jeffrey C. Bauer, president of the Bauer Group; Tim Size, executive director, Rural Wisconsin Hospital Cooperative; and Orvill B.R. Adams, director, Department of Medical Economics, Canadian Medical Association.

Gentlemen, we're delighted to have you. Your prepared statements will be entered into the record. We ask that you keep your

oral testimony fairly brief so that we'll have some time for discussion with you.

We will now turn to the panel of witnesses, and we'll begin with Mr. Bauer, and simply move across the table.

Mr. Bauer, you may proceed.

**STATEMENT OF JEFFREY C. BAUER, PRESIDENT, THE BAUER GROUP, HILLROSE, CO**

Mr. BAUER. Thank you, Mr. Chairman, it's a pleasure to be here.

I'm particularly delighted with the fact that the committee has decided to focus on some of the fundamental issues of rural health care.

I've been specifically asked today to address two of these fundamental issues: First, the levels of care that are appropriate in rural settings; and, second, the effect of high quality health care on rural communities.

On the first of these very fundamental issues, namely, the appropriate levels of safe and appropriate health for rural America, I've developed a general model, based on my 17 years of experience directly in rural health care and, in particular, my last 7 years as a resident of remote rural America. I live a mile and one-half north of Hillrose, Colorado, with a population of 200. And to begin my metaphor, I just wanted to let you know that Hillrose is much too small to support a doctor, much less a hospital. And if we tried to have either a hospital or a doctor, neither would be any good, by virtue of low volume.

So we, who live in Hillrose, have to go 10 miles for our health care to the town of Brush, Colorado, which has 4,500 residents and supports six primary care doctors and a 29-bed hospital, with substantial subsidy from a tax district. Although health care providers in Brush are good enough and big enough to provide us with competent care, both primary care and secondary or inpatient acute care, levels are subsidized. We're happy to be a part of the tax district that supports the health services in Brush.

However, we from Hillrose also know that if we need any advanced high-tech or intensive health care, we need to go 100-plus miles to providers in Denver. They have full tertiary services and, I believe, in Denver you can get just about any service short of liver transplants these days. And there is certainly a volume of care that allows private hospitals to operate without a subsidy.

So from my rural-health-economist/rural-resident's perspective, my personal experience of everyday health care is one where I can't get anything at home, have to travel a bit for primary and secondary care, and a lot for my tertiary care. From this perspective, I draw a couple of lessons. First, rural residents should not expect to get full-service, locally available health care. We simply can't produce enough volume and quality that would make us want to stay there, so we have to travel for some services. I have to travel for all of them. Second, the more the people in the rural community want local, full-service health care, the more they must be prepared to subsidize it, because low volume and reasonable fees simply won't pay the cost of full-service, locally accessible health care in rural communities.

These lessons I've learned from living in rural America and working as the president of a consulting company that specializes in rural hospitals are reflected in the model we have developed. It's based on a couple of assumptions. The first of these assumptions is that the rural health care services should be financially viable and clinically acceptable. By "financially viable," we mean that a community should not have services that it can't support with fees and subsidies. And by "clinically acceptable," we mean services that are both safe and appropriate in the setting.

We've done a lot of surveys with expert groups to come up with the data for our model. And, basically, what we've told health professionals when we asked them to jointly define "financial viability" and "clinically acceptable," is what kind of health services would they be willing to use in that community. Consistently, we have found other experts to believe that there is an economy of scale issue and that there are some things that we can't do well, even if we can afford them.

Now, further, we also believe, based on the extensive surveys that we've done—and, as a footnote, we've surveyed over 10,000 residents of rural America in 15 States in the last 5½ years—our market surveys show that rural health services available in a given community must be perceived to be at least as good as the competitive urban services. We know from our surveys of what we somewhat humorously call rural residents with real resources—the middle-income, middle Americans in the rural United States who have health insurance and money to pay for their health care—that they will travel substantial distances to get health care, and we know that the No. 1 motivation for their travel is the desire to get the highest quality. People, generally, in many areas of rural America don't believe that they can get appropriate quality in their home settings for a variety of reasons, so they leave and go to urban providers.

We believe, very firmly, that we must bring back those rural residents with real resources. We must bring them back because Medicare and Medicaid don't matter in the long run. It's my opinion that, even if we eliminate the differentials, something that is long overdue, and otherwise provide cost-based care for Medicare and Medicaid, it still won't be enough to save health care in rural America. We're still providing many services at a scale that is a little bit beyond the local reach.

We've also discovered, from our surveys, that rural residents lack confidence in many of their local providers. That will have to be corrected. We'll have to resolve the reasons for the lack of confidence in many locally accessible health services, if we're going to bring their money back to town. We don't believe that Medicare and Medicaid reforms will be enough to bring back viable full-service health care to rural America. We believe we must focus on the people who are not under the Government programs, who have real resources, and bring them back to purchase care from local providers.

Our surveys, my experience as a medical professor and a rural resident, and a couple of other perspectives led me to believe that the real foundation to bringing the money back to rural America is to have state-of-the-art primary care and emergency services. If we

ever intend to keep rural residents' health care spending at home, we absolutely must have a state-of-the-art, top quality base in primary care and emergency medical services. So I suggest that making sure we have state-of-the-art primary care and emergency services should be the key for our rural health policy. And that is much more important than saving rural hospitals as secondary or inpatient facilities.

Because of my epidemiology background and studying I've done, I believe that approximately one-half to two-thirds of the acute care beds in rural America's hospitals are medically unnecessary. As a health economist, when something is unnecessary, I think resources spent on it are wasted. So what I think is important for future rural health policy is to begin the reallocation of resources from mediocre, secondary facilities to state-of-the-art, top quality primary care and emergency services.

Our model has suggested and our experience in several communities has shown that we can do a fine job of having emergency services and primary care available in communities as small as 1,500 to 2,000.

We further believe that secondary or traditional acute care inpatient hospitals should serve market areas of a minimum of 15,000 to 20,000 residents. We also believe that a 30-bed acute care hospital that has an average daily census of 20 to 22 patients is the minimum way to go about this. Then there's a network of primary care and emergency services in smaller communities with regional secondary acute care hospitals serving 15,000 to 20,000 people that should all be linked to a tertiary facility so that everyone in rural America has local access to full-service health care.

Very quickly, I'd like to address what we believe should be done with the excess secondary inpatient acute care capacity. I believe very strongly that we need to convert these too-small hospitals to become primary care hospitals. And I'm a very strong supporter of the movement which has been recently embodied in Federal policy toward the rural primary care hospital. I think this is a fine solution for meeting the needs of rural health care. I'm absolutely opposed to closing a single rural hospital. I don't believe in rural hospital closure, but I certainly do believe in converting the hospitals that are too small to be good at secondary services to becoming state-of-the-art primary emergency centers.

The second issue you have asked me to address is how does the quality of health care affect community viability.

I'm an elected member of the board of our county's economic development corporation, so I see this concern on a fairly regular basis. In my experience, the existence of a local hospital is hardly ever a factor in rural economic development. Indeed, I've included in my prepared statement some examples to the contrary. The hospital may be the largest employer, which causes many people to want to support it, but I've argued that many of these employees are unproductive when they're dedicated to secondary care.

I think we will be far better if we reallocate resources to primary care and emergency services. And, indeed, in the models where we have done this, we have found that more money has been brought into the community.

So, very quickly, and in conclusion, to address this issue of the economic viability, it is our experience and our belief that if we build a base of primary care and emergency services, it will keep everybody at home for local access to a full-service system; we'll keep far more dollars at home; and the people who are taking at least half the health care spending out of town by going to big cities for even primary care and basic family medicine won't spend their dollars at urban shopping malls and buying TV's and things like that when they're in the big cities for health services.

So we also believe that the conversion to primary care and emergency services will keep dollars at home and end the outflow of dollars, which is one of the biggest drains on the rural economy. In conclusion, I think the real solution is to get serious about a base of primary care and emergency services, to make secondary care efficient on a regional basis, to tie this to urban tertiary centers and basically do all that because it will keep the dollars at home and aid the development of rural America.

Thank you, very much.

[The prepared statement of Mr. Bauer follows:]



PREPARED STATEMENT OF JEFFREY C. BAUER

## **"The Safe and Appropriate Level of Health Services for Rural America"**

### **Introduction**

I was delighted to receive Chairman Hamilton's invitation to focus my thinking on two specific concerns regarding health services in rural America: 1) the desired level of care that should be provided, and 2) the effect of quality of health care on the viability of a community. I am almost always asked to address the gamut of rural health issues, so scope and quality – the two most important issues, in my opinion – do not get sufficient emphasis.

I endorse the Joint Economic Committee's decision to understand two fundamental issues before exploring more transitory concerns such as payment reform and provider shortages. More money and more doctors by themselves will not solve the health care problem in many rural areas because small scale requires new approaches based on different models of service delivery and reimbursement.

### **Safe and Appropriate Levels of Health Services for Rural Areas**

As a health economist and rural resident, I have professional and personal interests in the match between the scope of locally available care and the size and needs of the population in a medical service area. Let me use my own

town of Hillrose, a small farming community in northeastern Colorado, to provide a "real world" illustration of this issue. If Hillrose had a doctor, he or she could hardly be kept busy by the medical needs of the town's 200 residents. This doctor would surely go broke, either by having too few patients or by charging fees that are unaffordably high. If Hillrose had a hospital to meet local needs, it would be no good because the staff would never be busy enough to maintain minimal skills. Further, Hillrose does not have the economic base to subsidize a doctor, much less a hospital, so taxes could not be raised to make up the difference between low volume and financial viability.

Consequently, we residents of Hillrose are quite content to drive ten miles to the town of Brush! for basic health care. A market center of 4,500 residents, Brush! has six primary care physicians and a 29 bed acute care hospital that can meet most of our secondary health care needs. The hospital receives annual subsidies of several hundred thousand dollars from a tax district that encompasses approximately 9,000 residents of Brush! and the surrounding area. The hospital does an acceptable job of meeting our needs for secondary level care.

However, we know that we must drive 100 miles to Denver for medical specialists and the services of a tertiary hospital. We do not have to go to the major medical centers in Denver for routine medical care because it can be provided well in the rural setting, but we also know that full-service, "high tech" health services can only be provided in a major metropolitan area. Due to the high volume of services they provide, Denver's private hospitals do not have to rely on tax revenues to stay in operation.

My personal view of health care as seen from really rural America illustrates two basic points. First, rural residents cannot expect full-service health care to be locally available. The smaller the community, the lower the level of health services that can and should be available in town; populations below a certain minimum size should not expect to have any doctors or hospitals at all. Second, the higher the level of services that rural residents want to have available at home, the more they must be prepared to subsidize care because low volume and reasonable fees do not generate enough revenue to pay for a quality product.

I have long-standing personal and professional interests in the inherent trade-off between local availability and affordable quality. As the country's only Ph.D. health economist who lives in a community too small to have any local health care, I have developed a model that I believe will improve both the efficiency and the effectiveness of the health care delivery system for rural Americans. The thinking behind this model is based on my 17 years of professional involvement in rural health, including the past six years of full-time consulting with rural communities and their hospitals. The data for the underlying quantitative analysis have come from my firm's clients, several national surveys, and reports of various state agencies.

This model embodies two important assumptions. My first assumption is that the scale of rural health services should be both financially viable and clinically acceptable. We should discourage rural areas from providing local services that cannot be supported with local resources and cannot be provided safely at the local scale. For reasons of quality alone, rural residents should expect to travel away from home to get health services that would not be provided locally at volumes sufficient to maintain the proficiency of local doctors, nurses, and technicians. (I am convinced that sub-optimal quality resulting from low volume is a serious problem for doctors and hospitals located in many rural areas.)

My second assumption is that the quality of locally provided rural health services must be at least as good as the quality of comparable services provided in urban areas, and rural residents must perceive that hometown care is at least as good as big city care. Many rural residents (at least half of them, according to my firm's surveys) go out of town for primary and secondary services solely because they believe that "bigger is better." I do not believe that rural health care can be saved financially until it is qualitatively acceptable to rural America's middle class – the people who have insurance and money to pay the full charges of their care. (Quality satisfactory to Medicare and Medicaid patients does not matter because Social Security programs do not pay the full costs of care provided to their beneficiaries.) Pure and simple, the future financial viability of rural health depends on providing top-quality care.

Reductions in quality occur when rural hospitals and doctors try to provide a range of services that is too broad with respect to the size of the local market. The most wasteful use of health care resources in many smaller communities is the operation of an acute (secondary) care hospital. In my experience, the absolute minimum cost of operating an acute care facility in accord with minimum regulatory requirements is approximately \$1,000,000 per year. When the hospital serves too few patients to generate patient care revenues of this magnitude, the community must subsidize the operation to keep it open. Many small towns tax themselves to the limit to preserve locally provided secondary care, leaving no money left over to provide primary care and emergency services at levels of quality acceptable to the middle class people who pay their bills in full. In the absence of high-quality doctors, nurses, and emergency medical technicians, these people tend to take their health care dollars somewhere else because they do not have confidence in the local providers.

My firm's extensive marketing surveys suggest that these residents with resources to pay for health care would have the necessary level of confidence in the local health care system if state-of-the-art primary care and emergency services were available. When presented with an informed choice between an underutilized (and, therefore, perceived to be inferior) acute care hospital or top-quality primary care providers and ambulance crews, the paying customers express an overwhelming preference for the latter alternative.

Consequently, I believe that top-quality primary care and emergency medical services (EMS) systems, not acute care hospitals, should be the public policy goal for locally provided rural health care. Further, based on my modeling and

experience, I believe that clinically acceptable systems can be built to meet the needs of market areas with as few as 1,500 to 2,000 residents. A major federal program to insure top-quality primary care and EMS to rural America would be the best possible expenditure of funds for rural health care.

A shift in emphasis from secondary, hospital-based care to primary care and ambulance-based emergency care raises the issue of the desirable supply of acute care hospitals in rural America. My observations and experience lead me to believe that somewhere between one-half and two-thirds of the acute care beds in rural America are medically unnecessary. By logical extension, resources spent on the preservation of the existing supply of secondary services are wasted. To end this waste and to insure the existence of rural hospitals that meet the joint conditions of financial viability and clinical acceptability, I suggest that we should only preserve acute care hospitals that serve health care market areas with a minimum of 15,000 to 20,000 inhabitants. In my estimation, the absolute minimum size of the hospital that deserves to be preserved as a matter of intelligent public policy is approximately 30 acute care beds with an average daily census of at least 20 to 22 patients. Anything smaller will be too small to appear to be good enough to the middle class rural Americans who have the money that can save locally available health care.

These regional secondary care facilities should be the hub of a system serving clusters of state-of-the-art primary care clinics and ambulance systems. Special attention must be paid to the communications and transportation infrastructure that links the primary and emergency care providers to the secondary care hospital. Moving patients and information to efficient and effective regional acute care hospitals makes much more sense than preserving a lot of too-small-to-be-good hospitals just so that patients will have local inpatient care.

The final component of this model is formal affiliation between the primary and emergency care systems, the regional secondary care hospital, and an urban tertiary care center that can provide complete clinical support to the rural providers. A formal relationship between all three levels of care should insure rural residents anywhere local access (not necessarily local availability!) to a full-service health care system, one which provides all levels of care as close to home as possible consistent with the requirements of high quality.

Compared to the existing allocation of rural health resources, this new system will require a substantial shift from secondary care to primary care and ambulance-based emergency services. In particular, it will require converting many existing rural hospitals from secondary care to primary care. No rural hospitals should be closed, but I believe that more than 1,000 should be converted to become rural primary care hospitals (RPCH) with 3 to 6 short-stay observation beds for infirmary-level care. The rural health program embodied in the latest budget reconciliation package is an excellent move in this direction, as long as its provisions for emergency care in a RPCH can be met by ambulance systems rather than emergency rooms. I do not believe that patients with truly life-threatening emergencies should be taken to a rural primary care hospital for stabilization. Rather, the RPCH should maintain a modern

ambulance system with emergency medical technicians who can stabilize critical patients at the scene of the illness or injury and transport them to the closest secondary or tertiary care facility that is equipped and staffed to meet the patients' specific needs.

Although my proposal may sound revolutionary, its central concepts are not new. The Hill-Burton program of 1946 was based on very similar thinking, and it succeeded in producing a rural health system that was well-suited to the medical needs of rural America in the 1940s and 1950s. However, the rural America and the medical science of the 1990s are dramatically different. We need to apply the good conceptual models of the past to the demographic and clinical realities of the future. Rural America will be correspondingly improved by more primary care and less secondary care – the sooner, the better.

### Quality of Health Services and the Viability of Rural Communities

The link between quality of rural health services and the viability of rural communities is very important, but the conventional understanding of the linkage is misdirected. Departing from the long-standing belief that a hospital is the precondition of quality in health care, the common interpretation of the link between quality and viability suggests that rural communities cannot attract economic development if they do not have a hospital. By extension, the loss of the local hospital is usually seen as the precursor of economic death of a rural community.

In my opinion, the existence of an acute care hospital is not a very important issue in rural economic development. I have been actively involved in economic development efforts for the past six years as an elected member of the Board of Directors of the Morgan County Economic Development Corporation, and I have participated in advanced negotiations with several companies that were considering the establishment of new businesses in our rural county. I do not remember a single instance where the availability of a hospital was a determining factor in a company's decision whether to establish operations in Morgan County. (I do remember one instance where the existence of the two underutilized hospitals in our county was cited as a negative factor because the owner of a major meat packing company believed that the duplication would increase the costs of health care for employees.)

The issues that matter in rural economic development are the costs and skills of available labor, tax incentives, free or reduced-cost land and buildings, and transportation. The social base of a community gets much less attention than the economic base, and schools seem to be far more important than health care. To the limited extent that a development prospect may inquire about health care, the concern is much more likely to be with the ambulance system than with the hospital. Health care in general and the hospital in particular do not seem to me to have much to do with rural economic development.

Likewise, I do not believe that the loss of a local hospital is automatically the death knell for a rural community. My firm has helped "close" hospitals in several small towns that are now better off without an acute care facility. I put *close* in quotes because the real issue is not closing the facility, but converting it to an alternate use that contributes more to the economic base of the community. For example, our client in Rocky Ford, Colorado, "closed" its hospital by selling the building to a national nursing home chain. The substantial proceeds of the sale were put into a community foundation that now makes grants for other health services in the community, and citizens no longer need to worry about subsidizing the hospital in order to keep it open.

Indeed, I am involved in the "closure," i.e., conversion, of at least a half dozen hospitals, and in every case, the economic base of the community is being improved in the process. We should not save rural hospitals in order to save rural America; the termination of acute care in smaller communities can be a wise economic move, as long as it is tied to enhancement of primary care and emergency services. The hospital may be the largest employer in a typical small town, but it is not necessarily a productive employer. Our nation will be much better off if we begin to focus on alternate uses of hospital buildings and alternate ways to improve the quality of health care in rural America.

What, then, is the important link between the quality of health services and the economic viability of the rural community? I believe the really important issue is the overall drain of community resources that occurs when the middle class takes its health care business out of town. When rural residents with health insurance and money go to the big city for a doctor's appointment or hospitalization, their local economies are harmed because they do not restrict their urban purchases to health care. They buy groceries, clothes, appliances, meals, automobiles, and a variety of other goods that are getting harder and harder to find at reasonable prices in rural America because Main Street merchants cannot compete with the cities' high-volume, low-price shopping malls.

In other words, I believe that the economic viability of much of rural America is being sapped by the outflow of consumption spending that is associated with medical visits to the city. If rural residents did not perceive the need to go to an urban area to get good health care, the rural economy would be much healthier because more money would remain in small towns. (The exact magnitude of the outflow is unknown, but our rural market surveys suggest that it is substantial.) Therefore, improving the perceived quality of locally available health care is directly linked to the economic viability of rural communities.

Putting more money into mediocre secondary care will not solve the problem, but insuring state-of-the-art primary care and emergency services offers a lot of promise. Our own data and some other studies suggest that approximately 50% of all health care spending is leaving rural America now, but 80% of rural residents' health care needs could be provided locally through modern primary care and emergency facilities. The local economic difference between a 50% market share with a weak secondary care hospital and an 80% market share

with a strong primary care hospital or clinic is significant, even if the subsidy for each alternative is the same. Further, when the rural middle class learns that 80% of health care can be locally provided at equal or better quality, the overall rural economy will get a significant boost because more consumption spending will stay at home.

### Conclusion

In my opinion, the biggest problem facing rural health today is our national preoccupation with secondary care, i.e., the traditional hospital. Many rural communities are too small to support financially viable and clinically acceptable hospitals, so rural residents with an ability to pay perceive a need to purchase their health care elsewhere. The loss of their health care business is accompanied by a loss of consumption spending that threatens the economic viability of the home community. However, these smaller communities could use the same resources to establish excellent, state-of-the-art capabilities in primary and ambulance-based emergency care.

Recent federal legislation includes several demonstration programs that recognize the need to shift resources from secondary care to primary and emergency care in many rural areas. I am pleased with this progress, but I close with a plea for even more federal leadership in bringing about a greater and speedier transformation. Too many small, rural hospitals are barely surviving today, and they will be gone by the time these promising demonstration programs are embodied in national health policy. We need to help them with conversion and consolidation while they are still open because conversion now will be much less costly than reopening and restructuring them after they are closed.

I submit that the basic concept of the rural primary care hospital is like AZT. Its initial promise makes it too good to withhold from others who need it. Please join me in making a serious commitment to high-quality primary care and emergency services for rural America by guiding the prompt reallocation of scarce resources from inappropriately small rural hospitals to new and better regional systems.

Representative HAMILTON. Thank you very much, Mr. Bauer. Mr. Size, please proceed.

**STATEMENT OF TIM SIZE, EXECUTIVE DIRECTOR, RURAL WISCONSIN HOSPITAL COOPERATIVE, SAUK CITY, WI**

Mr. SIZE. Thank you very much for inviting me here to testify. I believe there are two ways we can change the health care system, or most any other system. I think one way is fundamentally based on a mandate, a blue print, a single solution, a top-down approach.

I think the other is a mechanism, a facilitating, a bottoms-up design in energy. I believe I'm here to try to represent the position of the latter; what makes sense, both from a content and a process point of view from the local level, and how the Government facilitates local level change.

Without getting too philosophical, I did try to put in my prepared statement something I feel is critically important. That was in the preface where I talk about the rural context and some rural values. There's a new book out, by Max Depree, chairman of Herman Miller, which we found incredibly to the point. Briefly, it talks about liberating people to do what is required of them in the most effective way possible. He then goes on to talk about what he calls, eight rights. We might, in this context, call it design characteristics or criteria that one would look for in terms of designing a system. I guess I'd recommend those specific points to you, as well as his book, and perhaps it will be interesting to discuss it in the Q and A section of this hearing.

I think it's obvious, probably, by now, that I don't believe in cookie-cutter solutions. Jeff Bauer mentioned a fine solution. But I think where we might have a different emphasis is about how many fine solutions there are. I believe rural America is very diverse, and that there are multiple solutions needed and multiple solutions being discussed.

There's a great difference between those areas that are very scarcely populated and those with few resources, as compared to those in many parts of the country where the population is a little dense, the infrastructure is a little stronger.

My prepared statement talks about a number of perspectives of rural health care, specific problems, and comparisons frequently neglected between rural hospitals and inner city. I won't repeat that, now, but we can talk about it later if there's interest.

I'm very pleased that your committee is having this hearing because I think it's part of a movement across the country to more closely link issues of rural health and rural economic development. It's something we in rural health have talked about for the last 5 or 6 years, and during the last 2 or 3 years, we've really begun to see widespread, serious consideration of linking those issues together.

As one example, we've just done some rough work, looking at the 20 hospitals in the rural co-op. Of those rural hospitals, we estimate that the combined impact of acute care hospitals as well as their medical staff and clinic activity, has a long-term implication of \$250 million a year. If that was all in one huge company somewhere in Wisconsin, if that company were threatened, there would



be headlines every day until it was fixed. The fact that it's dispersed throughout southern and central Wisconsin makes it a much more subtle issue, and the issue does not get the attention it deserves.

Let me shift, quickly, to the issue of cooperative. Basically, why would one want a cooperative? What does it have to do?

I guess, I think, fundamentally, it goes back to the values Max Depree was talking about, that's liberating people to do what's right. Having a basic belief that local communities, if given the right assistance, given a certain amount of facilitation, that they will do what's right, both for their community, as well as for the Nation and State.

In many rural areas, cooperatives have been very helpful. I think the reason why we support an expansion of the cooperative concept is, one, their track record, and two, cooperatives are uniquely sensitive to local conditions. Because they're controlled and run by local people, that sensitivity is maintained. I think they're ideal for dealing with the competitive disadvantage of rural areas where we frequently have to deal with low-volume issues. Infrastructure co-ops, such as hospital co-op and housing co-ops, and so on, have proven to be effective. I believe established co-ops are an underutilized resource we can build on.

What can the co-op do for a community? I think this gets a little harder, a little bit more complicated, particularly when we're here in Washington where, frequently, solutions are seen as; well, what can we put into the statutes and regulations that will fix the problem. Co-ops and local solutions are inherently sloppy. It's not a clean fix. It's very much going to depend on what the community wishes to invest. And how much energy and creativity they wish to put into the cooperative effort will very much determine how much that cooperative begins to meet the needs that we all agree exist.

I've talked in some detail about how we do business. I'll skip over that in my verbal remarks. Let me just quickly draw your attention to a brief description of the co-op. Basically, we serve 16 counties in southern and central Wisconsin. I believe that's about four congressional districts. We compete with or are contiguous to about five separate metropolitan statistical areas, but, compared to them, our population is significantly older, poorer, more unemployed, in worse health, and working in declining industries.

In my prepared statement, I think I show that, when you look at our demographics, we look very much like an inner-city community. We're composed of 19 rural, acute, general hospitals and the University of Wisconsin-Madison, where our rural hospitals are about 50 beds and about 40 percent occupancy, about 1,500 admissions a year, about 4,200 emergency room visits, and about 9,600 outpatients. So you can see, already, our hospitals are largely shifted more into outpatient mode than many would have seen a few years ago. Half of our facilities run nursing homes. Most of our facilities are hubs for multiple community services; home health, hospice, et cetera.

Rural hospitals are increasingly diversified. The co-op, itself, is a separate corporation. It employs or contracts 150 people and has an annual budget of about \$3 million. That's exclusive of our affiliated corporations like HMO of Wisconsin. We're large for a rural coop-

erative or network; we're small, however, compared to traditional hospitals.

We've listed some of our accomplishments over the last few years. I won't repeat them. However, I would like to draw your attention to what our immediate future looks like. And it's very consistent with what Mr. Bauer referred to on the issue of quality. Rural systems, rural hospitals' ability to show to their communities that they're providing quality care—and when they're not providing quality care in certain instances, that they are able to remedy that situation—will make the difference about the future of rural health care more than any other single issue.

What we're basically working on now, as our primary cooperative project, is the rural physician regionalized credentialing program and our quality assurance program. We believe we're probably on the cutting edge around the country on this issue. And I totally agree that our ability to solve this issue will determine our future viability.

In summary, I'd like to say that we're looking for solutions that build on the strength of rural America, rather than those that, due to weaknesses, seek to impose an external model.

Thank you.

[The prepared statement of Mr. Size follows:]

PREPARED STATEMENT OF TIM SIZE  
 BETTER HEALTH CARE FOR RURAL AMERICA:  
 A RURAL COOPERATIVE PERSPECTIVE

**I. EXECUTIVE SUMMARY**

To understand rural communities and their organization of health care it is critical to understand the context and values that drive local decisions and preferences. Max Depree, chairman of Herman Miller, Inc. and now author of "Leadership is an Art," states in his highly acclaimed book that the art of leadership is "liberating people to do what is required of them in the most effective and humane way possible." He talks about the benefit of leadership that meaningfully integrates workers and staff into the heart, mind and future of the enterprise. We believe this integration is equally important for rural health care's multiple corporate and government players.

Rural America is a place of great variety. Rural communities, like the hospitals that serve them, vary greatly. Rural Georgia is quite different from rural Wisconsin, and its hospitals usually reflect those differences. Despite their differences, many, if not most rural areas share a set of common problems, including: growing shortage of health care professionals; inequitable physician and hospital reimbursement; higher unemployment and lower family incomes; fewer insured people and lesser ability to pay health care bills; declining populations as rural people move to cities; a shrinking tax base with an increasing demand for tax funding; perhaps due to the above, more stress-related health problems.

While there are many similarities between inner city urban and rural hospitals, there are also some important differences that particularly challenge rural communities: Federal reimbursement model biased against rural economies, the cost of maintaining critical access, medicare problems that hit particularly hard, ambulatory care as a way of life, generalist personnel needed.

Traditionally, the economic development role of hospitals and other health care providers has been valued in terms of their ability to help attract new industry in a manner equivalent to lovely vistas and good fishing. However, many communities are beginning to understand that health care is in and of itself a major industry bringing many dollars into rural counties for local wages that in turn become local household expenditures. An estimate in 1986 for the 19 small rural hospitals in the Rural Wisconsin Hospital Cooperative and their associated medical staffs indicated a long-term economic value to rural Wisconsin communities of approximately \$250 million dollars per year.

There are at least 5 reasons why cooperatives should be part of rural development: their successful track record in rural development; that they are specifically positioned to provide development and growth which is sensitive to local business conditions; it is an ideal mechanism for dealing with the principle competitive disadvantage of rural areas; infrastructure cooperatives are viable, cost effective and proven; established rural cooperatives are an underutilized resource. Like exercise, a cooperative doesn't have one approach for any and all situations - but it does hold for those willing to get involved with us the opportunity to build the local flexibility and united strength required by today's competitive health care environment.

The Rural Wisconsin Hospital Cooperative Hospitals are located in 16 counties in southern and central Wisconsin (2 SMSA, 14 rural); of the 14 rural counties, 12 contain only RWHC hospitals. In those 12 counties where all of the county is in the RWHC service area a population of 300,000 people is spread over an area of 9,000 square miles with a population density of 32 people per square mile. Compared to neighboring urban counties, our population is in worse

health, significantly older, poorer, more unemployed and working in declining industries.

RWHC consists of 19 rural, acute, general medical-surgical hospitals in south and central Wisconsin as well as the University of Wisconsin Hospital and Clinics. RWHC rural hospitals averages annually 50 beds with an approximate occupancy of 40%, 1500 admissions, 4200 annual emergency room visits, 9600 other outpatient visits, total hospital revenues of \$5 million, total inpatient revenues of \$3.3 million: 53% Medicare, 29% "Private Pay", 7% Medicaid, 6% HMO, 5% Bad Debt/Charity Care. Nursing homes are run by 10 hospitals, averaging 75 beds at 89% occupancy. While RWHC hospitals are generally in better financial shape than their counterparts nationally, they are worse off than the average hospital in Wisconsin.

The experience of RWHC has become clear that there were several different ways in which a cooperative could function to create shared service opportunities for participating hospitals: to purchase and resell a service or good, to employ or contract with staff, to act as an agent (but non-contracting party) and to develop separate affiliated corporations. Obviously, several of these approaches may be applicable for any one project.

The average rural hospital is now losing money after many years of already paring down budgets to stay ahead of federally imposed payment inequities. The fat is well gone. With or without change, you will see an increasing escalation of the rate of closures, some appropriate, many not. The issue is now damage control, not problem avoidance. A Wisconsin peer group of hospitals, similar to those in the Cooperative (with an average daily census of 30), must allocate approximately 20% of their private revenue to cover charges not paid by Medicare; in addition they must allocate about 8% for charity care /bad debts and 7% for Medicaid short falls.

State and federal health care policy should encourage rural hospitals to meet both local needs as well as those reflected by state and federal policy makers. We need a public policy that is both consistent and flexible, and will: pay all hospitals and physicians adequately and equitably; hospital outpatient services should be paid at cost; develop increased local access; create immediate physician loan forgiveness programs; provide loan guarantees for appropriate capital needs; require state and federal regulations to be "rural relevant;" encourage new rural health care model development, and find ways to keep medicare Part A dollars in rural communities if the hospital closes.

Obviously, not all hospital closures have bad outcomes for rural health or the rural economy. Many closures, however, may seriously compromise the health care access of Medicare beneficiaries and other rural residents who have no other place to go for service that is within reasonable a driving time. The closure question is not *will* rural hospitals close, or even, *should* hospitals close? The questions is more appropriately are the "right" hospitals closing and how is the decision being made? Will there be a net benefit or cost to the local community as a result of the closure? Unfortunately, rural hospital closures are too often the result of bad luck or inadequate investment rather than lack of need - the health care and economic outcomes are almost entirely ignored, except by the rural communities themselves.

## II. PREFACE - A VALUES BASED FUTURE

To understand rural communities and their organization of health care it is critical to understand the context and values that drive local decisions and preferences. The reality that we are trying to create through the Rural Wisconsin Hospital Cooperative (RWHC) flows in large measure from these values. This testimony will attempt to describe our consequent perspective and experience regarding rural health and rural economic development; it will try to address a number of our relationships with public and private sector forces, both current and future.

Max Depree, chairman of Herman Miller, Inc. and now author of "Leadership is an Art," states in his highly acclaimed book that the art of leadership is "liberating people to do what is required of them in the most effective and humane way possible." While Mr. Depree's experience comes from a large, particularly respected Fortune 500 Firm, it is an excellent statement of the best of rural and cooperative values. He talks about the benefit of leadership that meaningfully integrates workers and staff into the heart, mind and future of the enterprise. We believe this integration is equally important for rural health care's multiple corporate and government players.

More specifically, Depree talks about eight fundamental conditions or rights that must exist if an "enterprise" is to succeed; we believe that rural communities and providers must have these rights respected if they are to be productive and effective in their provision of local health care:

**The Right to Be Needed** - All communities have unique gifts that need to be valued as a meaningful part of the nation's health care agenda.

**The Right to Be Involved** - Communities must have genuine involvement in the decisions that effect them along with the "privileges of problem ownership and risk."

**The Right to a Covenantal Relationship** - "Covenantal relationships fill deep needs, enable work to have meaning and to be fulfilling." Beyond legal contracts, it is a faith that local communities can and will do what is right if afforded the opportunity and resources to do so.

**The Right to Understand** - Communities have the right to understand the "strategy and direction" of federal health care policy and that of others with the corporate power to substantively effect their future.

**The Right to Affect One's Own Destiny** - "Few elements in the work process are as important to personal dignity as the opportunity to influence one's own future." This applies equally well to our sense of being able to affect the development of the health care policy and its impact on our local services and daily work.

**The Right to Be Accountable** - "We need to have contributions measured according to previously understood and accepted standards of performance, and this transaction needs to take place in an adult-to-adult relationship." The conceptual popularity of the Prospective Payment System to health care executives is in large measure due to its recognition of this need.

**The Right to Appeal** - Communities like individual workers need effective mechanisms to protect them against occasional arbitrary leadership.

**The Right to Make a Commitment** - Does current federal and state health care policy encourage individual workers, organizations and communities to do their best - are they encouraged in their natural effort to form a commitment to their work and institutions.

Rural hospitals in Wisconsin have been searching for an alternative to the two extremes of unsustainable traditional autonomy or "selling out" to state or national corporations. As a result of that search, the Cooperative has had substantial growth since it was begun in 1979 as a regional shared service organization and advocate for rural interests.

In 1983, one of the nation's first rural-sponsored HMOs was licensed as a joint venture between local physicians and hospitals as the result of a Cooperative initiative. In 1985, the Cooperative was named the Outstanding Rural Health Program of the Year by the National Rural Health Association and was awarded a citation of merit by the Wisconsin Legislature. Recently, it received two major Robert Wood Johnson Foundation awards: a Hospital-Based Rural Health Program Grant in 1987 and a Strengthening Hospital Nursing Grant in 1989.

The rural hospitals that are the Cooperative have no illusion about the difficult years ahead. They realize that not all will continue as acute care hospitals and that most will be substantially changed. The Cooperative is seen as having the potential to be the vehicle to help develop an alternative and better system built on values consistent with local primary care and community controlled not-for-profit facilities. A productive and effective health care system for rural communities requires their meaningful integration into the heart, mind and future of the nation's health care.

### III. RURAL HEALTH FROM A LOCAL PERSPECTIVE

(Portions of this section were taken from an earlier paper that was the result of a collaborative effort with Bob Van Hook, Executive Director, National Rural Health Association; however, all opinions or errors are only the responsibility of the panelist.)

#### A. Rural Community Hospitals Face Complex Challenges

Rural America is a place of great variety. Rural communities, like the hospitals that serve them, vary greatly. Rural Georgia is quite different from rural Wisconsin, and its hospitals usually reflect those differences. Despite their differences, many, if not most rural areas share a set of common problems, including:

- growing shortages of health care professionals;
- inequitable physician and hospital reimbursement;
- higher unemployment and lower family incomes;
- fewer insured people and lesser ability to pay health care bills;
- declining populations as rural people move to cities;
- a shrinking tax base with an increasing demand for tax funding;
- perhaps due to the above, more stress-related health problems.

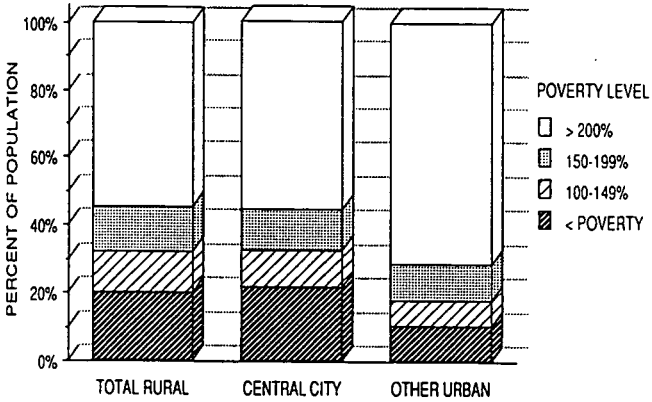
A variety of shifting health care system forces along with weak rural economies place many rural hospitals in jeopardy. At the current rate of more than 40 rural hospital closures per year, well over 400 or 15 percent of the nation's more than 2,600 rural hospitals will close in the next ten years. Recognizing that the annual number of closures has increased during the 1980s, the Senate Special Committee on Aging recently cited the projection that as many as 600 rural hospitals may close during this same time period.

#### B. Similarities Among Rural And Inner City Hospitals

Inner city and rural hospitals are both frequently subject to simplistic stereotypes - just as was mentioned earlier for rural hospitals, inner city hospitals also have many differences among them. However there are a number of important generalizations that can be noted about rural and inner city hospitals - less of an "odd couple" than many would think. The distribution of poverty is almost identical in rural and inner city communities; as insurance coverage in the United States is generally a function of income levels, hospitals in both areas face comparable economic problems. (See Figures 1. & 2.) Externally driven problems faced by rural hospitals are very similar to those used to support special assistance to teaching hospitals and hospitals with a disproportionate share of Medical Assistance patients:

Figure 1.

**POVERTY DISTRIBUTION BY RESIDENCE  
(FOR POPULATION UNDER AGE 65)**



SOURCE: RWHC 12/5/88

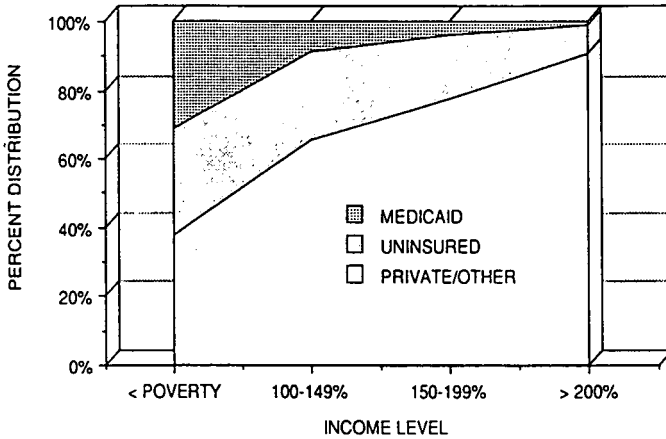
DATA: Triple Jeopardy, Rowland & Lyons

Rural Health Sources Research Conference  
San Diego, 12/13/87



Figure 2.

### INSURANCE COVERAGE BY INCOME FOR U.S. POPULATION UNDER AGE 65



SOURCE: RWHC 12/5/88

DATA: Triple Jeopardy, Rowland & Lyons  
Rural Health Sources Research Conference  
San Diego, 12/13/87

Inner city and rural hospitals both lack the resources needed to help them **adapt** to a radically changing environment.

Inner city and rural hospitals have **high proportions of uncompensated care** reflecting the relative weakness of the economies in the two areas.

Inner city and rural hospitals have **small private pay base** on which to shift the cost of care for the poor.

Inner city and rural hospitals **rely heavily on public payers** Medicare and Medicaid for their revenues, and both programs are under major budget pressure to pay less than cost. Combined they account for 50 percent or more of these hospitals' revenue.

Inner city and rural hospitals have **similar difficulties in attracting health professionals**.

Inner city and rural hospitals are the **sole community health resource** for the populations they serve.

If they **close** or curtail services, their **populations are left without access**.

### C. What Challenges Are Unique To Rural Hospitals?

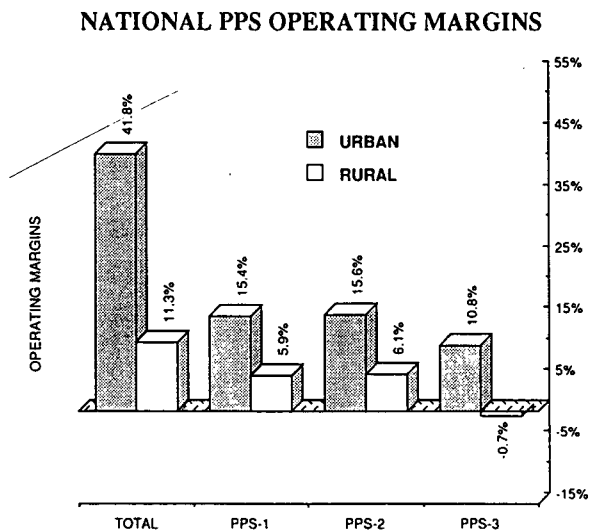
While there are many similarities between inner city urban and rural hospitals, there are also some important differences that particularly challenge rural communities:

**Federal Reimbursement Models Are Biased Against Rural Economies.** Rural hospitals and physicians are penalized for being "inefficient" because they work on a smaller scale in geographically less populated areas; at the same time they are denied the advantage of some lower input costs through deductions in federal reimbursement formulas. The reverse is true for urban providers; federal reimbursement formulas allows them to maintain the benefit of economies of scale while protecting them from the higher input costs. In the first 3 years of the Prospective Payment System, urban hospitals had an accumulated net operating margin of 41% - almost 4 times that of rural hospitals! (See Figure 3.)

**The High Cost of Maintaining Critical Access.** The sparse populations in rural communities result in higher standby costs for low volume services in rural hospitals, even if the service is as essential as emergency services.

**Medicare Problems Hit Particularly Hard.** Rural hospitals' heavy reliance on Medicare as a payer makes them disproportionately vulnerable to changes in the federal program. Every ripple in the Medicare program causes a wave in the rural hospital that makes for a very rough ride.

Figure 3.



SOURCE: RWHC 11/16/88

DATA: DHHS Inspector General

**Outpatient Care is a Way of Life.** One of the ways rural hospitals have coped with the changes brought about by PPS and by declining inpatient volume has been to develop more ambulatory services. It is not at all unusual for rural hospitals to have 40 percent or more of their total activity coming from outpatient services. These ambulatory services are going to be greatly affected by paying for them prospectively; many rural hospitals are predicting that this change could be the one that will halt more services than any of the Medicare changes to date.

**Generalist Personnel Needed.** Rural hospitals and other rural facilities have different personnel needs than larger facilities. There is a greater need for well-trained generalists in both nursing and medicine. Because of their low volumes, rural hospitals often require more part-time personnel, and where available, multi-competency personnel play a vital role in efficiency.

Differences in operating systems can be either assets or liabilities. Unfortunately, in the current environment much of the uniqueness of rural hospitals tends to show up on the wrong side of the ledger. This condition could be helped by recognizing that rural hospitals and clinics are not down-sized urban models. Rural communities and their organizations have unique characteristics that require creative and flexible intervention.

#### **D. Government's Role?**

Over recent years it has become fashionable "to blame the victim" of systemic social and economic forces - unemployed workers, the homeless, kids dropping out of school. It may make those of us who are doing okay feel better about ourselves - our own ability to be clever, to compete, to prosper. It is an attitude that protects us from fear - a fear based on an inner knowledge that our systems are fragile and that shifts in government policy or chance can radically change any of our lives.

While the FY 1990 Budget Bill included a number of very important improvements for rural health, we have not yet "turned the corner" in a number of areas particularly critical to rural health care; at a minimum they include:

**Medicare - Multiple Problems Continue To Be Used As A Smoke Screen For Government's Share Of Problem.** Discriminatorily low Medicare reimbursement is an issue for which the federal government is unquestionably responsible even though it is equally true that rural hospitals and rural communities do face a number of other problems. Because my son is still not yet spending enough time on his homework, I don't refuse to have his leg mended if he is in an accident. I certainly don't justify breaking the other leg saying, "well one's already broken."

The same is true for rural hospitals. We simply cannot ignore that under PPS, urban hospitals are reimbursed an average of about 36 percent more than rural hospitals for the same service. Even with the recent increased rural update factor, this differential probably remains over 30%. While the comparison of current rural Wisconsin payment rates to that for Madison, Wisconsin is slightly more favorable than the

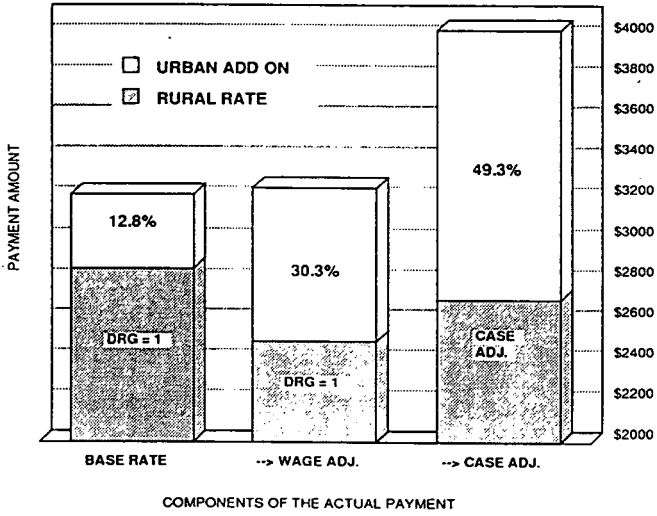
national average, RWHC hospitals are severely disadvantaged in Wisconsin's very competitive environment. (See Figures 4. & 5.)

**Health Personnel Shortages** continue to plague rural America. Most rural health care providers indicate that recruiting is harder today than it was even last year. Recruiting problems exist especially for family doctors, nurses and all types of therapists. The supply of critical personnel is simply too small to meet the increasing demand at both rural and urban facilities. Because supply is short, competition for health personnel is increasing. Underpaid rural facilities are having a more difficult time competing with other types of facilities and programs that have more resources, and in some cases, more desirable locations. (See Figure 6.)

**Lack of Access to Affordable Capital** is an increasing problem. Rural facilities built under the Hill-Burton Program in the 1950s and 1960s are aging and need to be replaced or remodeled. Rural hospitals are in weak financial condition; their building or remodeling programs often are consequently considered poor investments in the now nationalized capital markets. Rural people, like their urban counterparts, want attractive new facilities with the most modern equipment, and they will often drive past their rural hospital to get the amenities that they associate rightly or wrongly with quality care.

Figure 4.

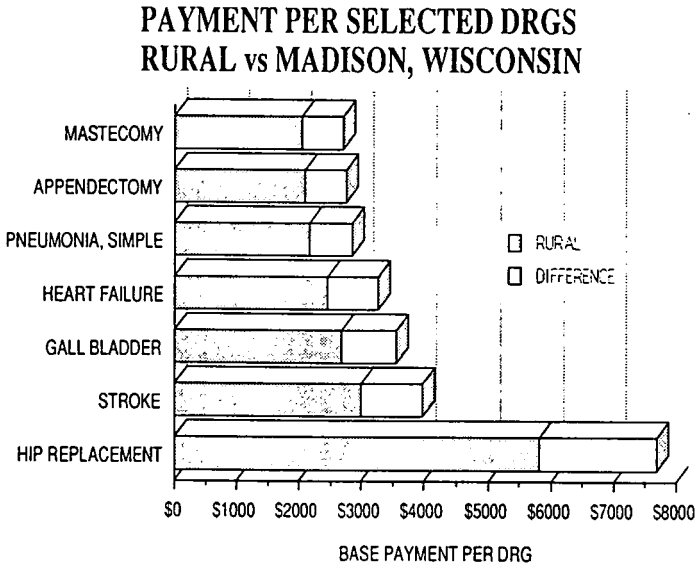
RURAL vs. MADISON, WISCONSIN PPS RATE



SOURCE: RWHC 11/14/88

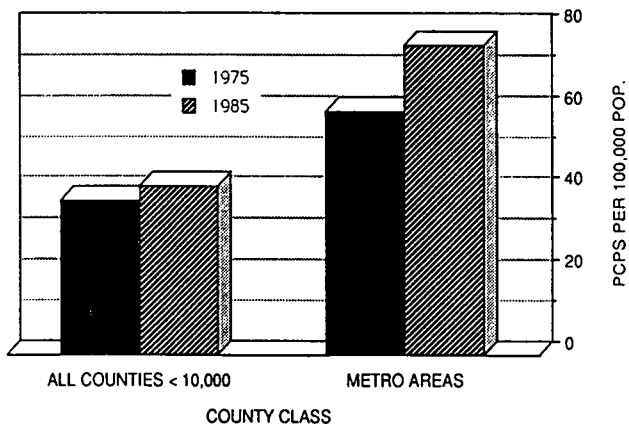
DATA: Rates From Federal Register

Figure 5.



SOURCE: RWHC 11/22/88  
DATA: Federal Register 9/30/88

Figure 6.

**PRIMARY CARE PHYSICIANS PER 100,000  
POPULATION BY COUNTY GROUP, 1975-1985**

SOURCE: RWHC 12/5/88  
DATA: TRENDS IN PHYSICIAN SUPPLY  
Kindig & Movassaghi, July, 1987



#### IV. RURAL HEALTH, DEVELOPMENT AND COOPERATIVES

##### A. Why Are Hospitals Important For Rural Development?

Traditionally, the economic development role of hospitals and other health care providers has been valued in terms of their ability to help attract new industry in a manner equivalent to lovely vistas and good fishing. However, many communities are beginning to understand that health care is in and of itself a major industry bringing many dollars into rural counties for local wages that in turn become local household expenditures. A report recently generated by the University of Idaho indicated that the economic value of a particular small rural hospital in Montana was sufficient to justify, conservatively, the county taxing itself over \$1,500,000 to subsidize the hospital and still break even.

A similar estimate in 1986 for the then 20 small rural hospitals in the Rural Wisconsin Hospital Cooperative and their associated medical staffs indicated a long-term economic value to rural Wisconsin communities of approximately \$250 million dollars per year. (See Figure 7.)

##### B. Cooperatives As Part Of Rural Development

Rod Nilsestuen, Chairman of the National Rural Cooperative Development Task Force, has cited five reasons why cooperatives should be part of rural development:

"Over the years, co-ops have established an extensive and very **successful track record** in rural development.

As self-help, locally-based, private sector, rural enterprises, cooperatives are **specifically positioned** to provide development and growth which is **sensitive to local business conditions** as well as responsive to the needs and services of local people.

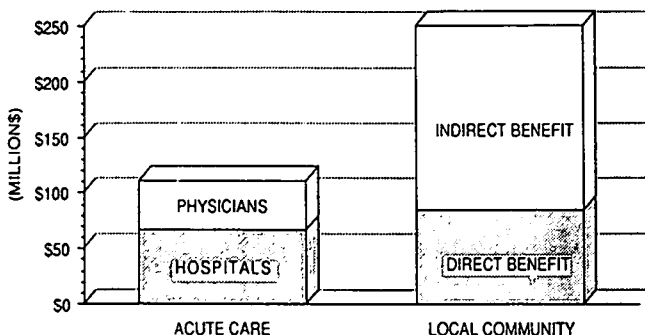
The co-op model is an **ideal mechanism for dealing with the principle competitive disadvantage of rural areas** -- fewer people/lower population densities and the resultant higher service costs and smaller markets. Co-ops aggregate capital, people business and consumer input and outputs and services into large enough units to be economic and competitive. Yet, unlike chains or franchise systems, they retain ownership and control at the local level.

**Infrastructure cooperatives** such as rural hospital co-ops, rural school co-ops, rural housing co-ops and cooperative child care, provide **viable, cost effective and proven** ways to maintain the vital rural service infrastructure.

**Established** rural cooperatives are a huge, **underutilized resource** which can be tapped to provide business growth and employment in both agricultural and non-agricultural sectors. As such, they are an ideal way to build non-agricultural business and employment while at the same time making good use of the existing agricultural cooperative business base."

Figure 7.

### ESTIMATE OF ECONOMIC ACTIVITY DUE TO RWHC HOSPITALS AND PHYSICIANS IN RURAL WISCONSIN COMMUNITIES



ON LEFT: TOTAL OF ACUTE CARE BUDGETS

ON RIGHT: RESULTING LOCAL ECONOMIC ACTIVITY

**ASSUMPTIONS:**

1. Longterm Economic Multiplier Equals 3.
2. 75% of Acute Care Dollars are Re-spent in Community
3. For every 3 dollars spent in the hospital, 2 dollars are spent in physician offices and for other acute care services

SOURCE: RWHC 11/22/88

### C. What Can A Hospital Cooperative Do For A Community?

This question is a little like asking if regular exercise will do you any good - it will, but only in proportion to what you put into it.

As a cooperative doesn't offer loss leaders to capture patients or corporate buy outs to take over responsibility and assets, active membership in a cooperative requires the rural hospital's personal involvement in its governance and continuing development. This is a cooperative's primary "charge" for facilitating a community's ability to sustain a local hospital.

Like exercise, a cooperative doesn't have one approach for any and all situations - but it does hold for those willing to get involved with us the opportunity to build the local flexibility and united strength required by today's competitive health care environment.

### D. Summary Of Major Alternatives For Cooperative Business

It has become clear that there were several different ways in which a cooperative could function to create shared service opportunities for participating hospitals:

The first and most obvious is **to purchase and resale a service or good** such as the group purchase of legal or financial services. [Given the availability in Wisconsin of strong group purchasing organizations for drugs and supplies, RWHC has not developed substantial activity in the traditional area of group purchasing.]

A second method is for the cooperative **to employ or contract with staff** to provide specific clinical or administrative services, such as emergency room medical coverage, physical therapy, administration of an insurance benefits Trust, development of new regional programs, etc..

A third method is the use of cooperative staff **to act as an agent but non-contracting party** for the hospitals, as in the case of negotiating specialty hospital-based medical consultation contracts.

A fourth method is **to develop separate affiliated corporations**, such as in the case of the HMO OF WISCONSIN.

Obviously, several of these approaches may be applicable for any one project. Shared service programs have grown because services were designed that met the needs of significant numbers of hospitals at a competitive price and due to the commitment of the hospitals to invest in the cooperative by purchasing its services.

## V. THE RURAL WISCONSIN HOSPITAL COOPERATIVE MODEL

### A. Description Of Area And People

The Rural Wisconsin Hospital Cooperative (RWHC) Hospitals are located in 16 counties in southern and central Wisconsin (2 SMSA, 14 rural); of the 14 rural counties, 12 contain only RWHC hospitals. (See Figure 8.) In those 12 counties where all of the county is in the RWHC service area a population of 300,000 people is spread over an area of 9,000 square miles with a population density of 32 people per square mile. **Compared to neighboring urban counties, our population is in worse health, significantly older, poorer, more unemployed and working in declining industries.**

In the 1980 census, individuals over 65 years of age represented 15.5% of the area's population, 129% of the state average. Median family income in 1979 was \$16,001, 76.5% of the state average. 9.5% of families were below poverty level, 151% more than the state average. Unemployment (in 1986) was at 8.6%, 124% of the state average. Individuals in 1980 were primarily employed in services (23%), manufacturing (21%), agriculture (20%) and retail trade (14%). Compared to employment in adjacent urban counties, we were much more dependent on agriculture, while much less involved with the service sector. RWHC hospitals employed 6.7% of the total of employed females in our service area.

### B. RWHC Hospitals And Key Characteristics

RWHC consists of 19 rural, acute, general medical-surgical hospitals in south and central Wisconsin as well as the University of Wisconsin Hospital and Clinics.

Originally all state approved hospitals in Wisconsin, Illinois, Iowa or Minnesota were eligible for membership in RWHC although with the exception of the University of Wisconsin, membership has been kept to hospitals located in rural communities and physically adjacent to current members.

RWHC rural hospitals averages annually 50 beds with an approximate occupancy of 40%, 1500 admissions, 4200 annual emergency room visits, 9600 other outpatient visits, total hospital revenues of \$5 million, total inpatient revenues of \$3.3 million: 53% Medicare, 29% "Private Pay", 7% Medicaid, 6% HMO, 5% Bad Debt/Charity Care. (See Figure 9.) Nursing homes are run by 10 hospitals, averaging 75 beds at 89% occupancy. While RWHC hospitals are generally in better financial shape than their counterparts nationally, they are worse off than the average hospital in Wisconsin. They have a lower average "Operating Margin", and substantially higher ratios in the key areas of "Long Term Debt To Equity", "Average Plant Age" and "Days In Account Receivables". (See Figure 10.)

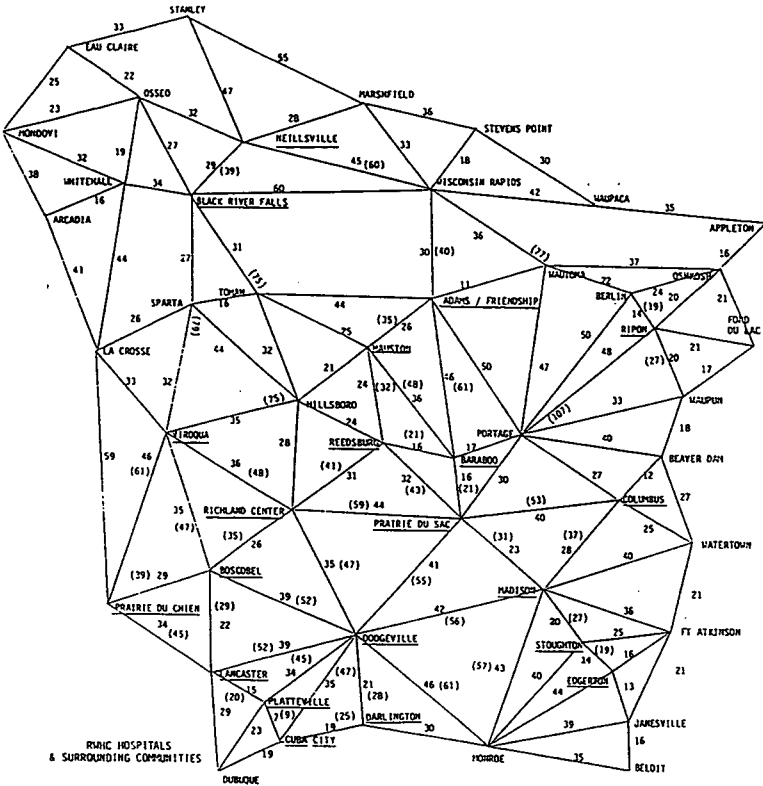
### C. Why And How Did The Cooperative Start?

The Cooperative was incorporated in the summer of 1979 as the result of informal discussions among several hospital administrators in southern Wisconsin. The purpose was to develop a corporation that could be a base and catalyst for the development of joint ventures that was not controlled by any one hospital. The model of the dairy cooperative was chosen because it



Rural Wisconsin  
Hospital Cooperative

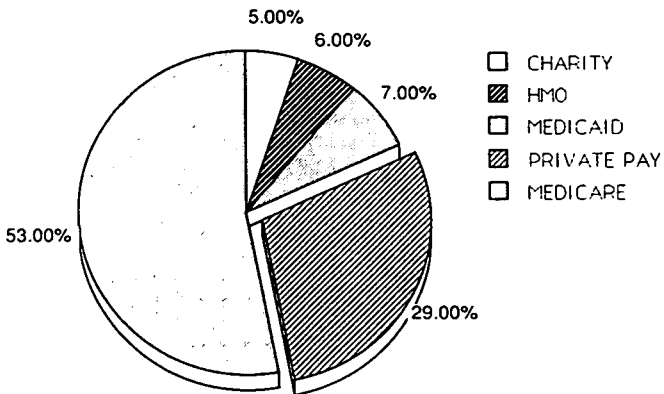
Figure 8.



RWIC HOSPITALS  
& SURROUNDING COMMUNITIES

RWIC Members are  
underlined  
Approximate road  
mileage is shown  
Travel time is  
shown in (minutes)

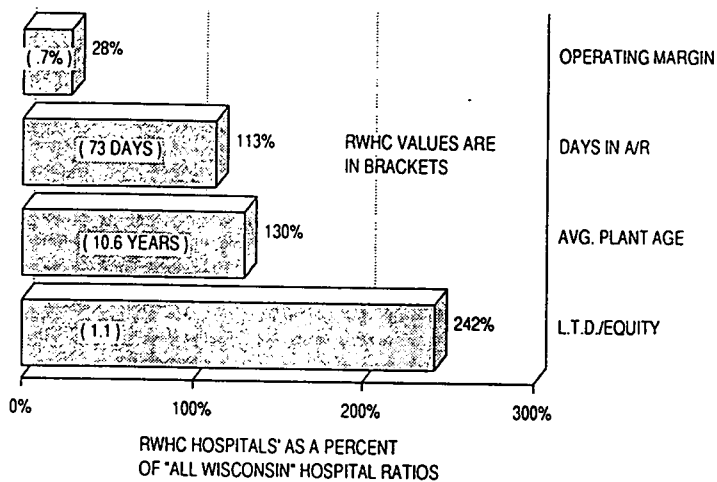
Figure 9.

**RWHC HOSPITAL AVERAGE  
INPATIENT REVENUE BY SOURCE**

SOURCE: RWHC 11/21/88  
DATA: 1987 RWHC Survey

Figure 10.

### SELECTED FINANCIAL RATIOS OF RWHC HOSPITALS



SOURCE: RWHC 11/16/88

DATA: RWHC &amp; State Surveys

respected the autonomy of the sponsors and was a type of organization familiar to the community boards that would have to approve individual hospital participation.

A few early successes were seen as critical to establishing the credibility necessary to gain more substantive commitment from existing members as well as to attract additional members. During the fall of 1979, the decision was made that a paid staff person was necessary if the Cooperative was to develop into a serious enterprise. Consequently, each of the 10 members at that time pledged \$5,000 for the first year (now \$6,500 per year.) An Executive Director was recruited and office space found in one of the hospitals.

At the same time, a second major function of the Cooperative was developed in response to a local health systems agency's committee report. Without input from the communities to be affected, a series of draft recommendations were released that suggested the consolidation or closure of most of the rural hospitals in southern Wisconsin. Public opposition was demonstrated by attendance in the hundreds at each of the hearings held around the region. The Cooperative led the charge (or was led by it) to successfully defeat an unfortunate example of top-down planning.

The Cooperative, at a very early point in its development, was given the opportunity to demonstrate the value of rural hospitals working together while simultaneously attracting substantial favorable public attention in many rural communities. The mission of the Cooperative being expanded beyond its initial one of shared services to include rural advocacy was made, not born.

#### **D. Statement Of RWHC Mission And Goals**

In 1985, five years after its beginning, RWHC reviewed and restated its statement mission and goals. While it has the mandatory praise of motherhood, a commitment to developing a more highly integrated system of rural health care was added. It is interesting to note, in anticipation of a now more familiar linkage, a recognition of the importance of rural economic development was added. The statement now reads as follows:

**Mission.** The Cooperative as hospitals acting together will promote the preservation and further development of a coordinated system of rural health care. Such a system will provide both quality and efficient care in settings that best meet the needs of rural residents in a manner consistent with their community values. Through its collective strength, the Cooperative is a catalyst to create necessary change in the delivery of rural health care. The Cooperative recognizes it has an important role in rural economic development. To meet this mission, the following goals are established:

**Goal #1: The Environment.** The Cooperative will utilize its collective strength to support rural health care and rural communities in both private and public sectors. It will represent the rural perspective on legislative and regulatory issues affecting rural health care and illness prevention with the political influence necessary to be an effective advocate. It will negotiate jointly, as appropriate, to maximize the effectiveness of its members in private sector affairs."



**Goal #2: The Corporation.** The Cooperative will develop alternatives for rural hospitals and affiliated institutions to the increasing presence of competing health care corporations and systems."

**Goal #3: Products And Services.** The Cooperative will develop and maintain efficiently operated services for its members. It will be a corporate vehicle to provide flexibility to individual institutions by incorporating a broader base of support for programs requiring substantial participation or risk sharing."

#### **E. RWHC Organizational Structure And Governance**

RWHC is a cooperative, modeled directly after agricultural cooperatives common to many areas of rural America. RWHC is governed by a Board of Directors consisting of one representative (usually the hospital administrator) from each RWHC hospital. RWHC is connected to HMO of Wisconsin through an interlocking Board of Directors and formal staff liaisons.

Each RWHC hospital has one vote on the Board of Directors. While a consensus is usually sought, it is not required or always possible. The Board meets monthly, except in relatively unusual situations where the agenda is too light to justify a meeting. An Executive Committee is empowered to act on behalf of the Board between regular meetings and performs the functions of planning and personnel committees. A Finance Committee is responsible for setting and evaluating financial goals and performance. Ad-hoc Committees are created as needed for specific time-limited functions.

RWHC hospitals have two distinct roles in decision making related to Cooperative activities. As a Director of RWHC, decisions are (usually) made from the perspective of what is best for the Cooperative. As a hospital administrator, decisions about participation in a RWHC program are made from the hospital's individual perspective that includes the judgment of the hospital board, medical staff and other local parties. Services provided to RWHC hospitals are based on written contracts between each participating hospital and RWHC. Apart from limitations within some of these contracts, RWHC hospitals are not required to purchase services solely through RWHC.

#### **F. Selected Review Of RWHC Accomplishments**

Since 1979, RWHC has tried to be an aggressive and creative force on behalf of rural health care. It has become nationally recognized as one of the country's earliest and more successful models for networking among rural hospitals, physicians and communities. By actively sharing RWHC experience and ideas, it has contributed to the implementation of similar efforts around the country. RWHC, with 20 hospitals, employs or contracts for the services of approximately 150 people and has an annual budget of almost three million dollars (exclusive of affiliated corporations). Major projects that have been successfully implemented by the Cooperative include:

**Development and early administration of HMO OF WISCONSIN, one of the first rural based HMOs in the country, currently with over 40,000 members and operating on a consistently profitable basis.**

**Development and administration of the RWHC Trust (for indemnity health and dental insurance), which saved members over \$360,000 in its first year alone and continues as a dual choice option for RWHC Hospitals.**

**Implemented a Mobile CT and Nuclear Medicine Services to rural hospitals, reducing cost and improving access to this service for RWHC members and other area hospitals.**

**Development of the Community Health Project (CHC), one of the country's first rural based syndicated marketing programs for hospitals. This project was terminated due to a lack of continuing interest although aspects of the campaign continue to be used.**

**Implementation of a broad range of shared services, which help to improve access, reduce cost and/or maintain appropriate staffing in areas such as: physical therapy, respiratory therapy, occupational therapy, speech pathology, audiology, printing services, management development and guest relations training.**

A particularly productive and popular RWHC activity has been **Professional Roundtables that regularly bring together RWHC hospital staff of the same discipline for mutual sharing and problem solving, continuing education and advising the RWHC Board and staff on program and policy development.** This has been recognized as one of the prime benefits of RWHC to the administrators - learning from each other. The number of these roundtable groups that are active has significantly increased and now include 14 professional or managerial groups (i.e. lab, pharmacy, radiology, etc.).

**Negotiated special group contract arrangements for members to obtain high quality consultant services in areas such as: legal services, personnel services, market research, patient discharge studies and consultant pathologist services.**

**Successful state and federal advocacy for rural health in areas relating to: Medicare and Medicaid payment equity, access to capital, appropriate regulatory reviews, transition grants and loans, etc...**

In the last two years, three particularly substantive programs have been initiated: **physician staffing of rural emergency rooms, a quality assurance program that will include a process for regional physician credentialing and privileging and a program to identify and implement comparative productivity indicators.**

## **VI. FUTURE OF RURAL HEALTH AND COOPERATIVES**

### **A. Cooperative Model To Assure Quality Of Care**

The Rural Wisconsin Hospital Cooperative was awarded a Robert Wood Johnson Foundation Grant in the Fall of 1987, with external funding expected to continue through 1991. The major portion of the grant is the Quality of Care Program, which consists of efforts to improve the RWHC hospitals' quality of care through the implementation of a cooperative quality assurance program and physician credentialing process, as well as provision of administrative and technical support for the existing hospital quality assurance programs.

It is anticipated that the cooperative quality assurance program and physician credentialing process will provide the comparative data and regional perspective necessary to maximize each individual hospital's potential to provide quality care. It is crucial to the success of this program that each hospital maintain responsibility for individual quality assurance programs. The role of RWHC is perceived as a central to the development of "model" programs, for data collection and analysis. Each hospital has the option of participating in any, or all activities of the program.

The program is managed by a registered medical record administrator with 10 years of experience in rural health care. The RWHC Board recently approved the hiring of a physician to assist with the medical staff component of the program. This position has been accepted by a family practitioner with 9 years of experience in rural health care, a strong interest in quality assurance, peer review and computers.

Principle Activities of the program to date include development of a data collection project which consists of hospital wide outcome indicators. Data collection was implemented with discharges occurring on or after January 1, 1989. It is anticipated that the indicators will need to be evaluated and updated routinely. The current indicators are recognized as basic, and far from perfect, but the emphasis at this point is to acquaint everyone with the process involved with cooperative data collection. Once this is achieved, it is anticipated that it will be relatively easy to update the indicators.

### **B. Cooperative Model To Access Capital**

The Cooperative has developed a model based on a private-public partnership to facilitate rural hospital's accessing of major capital markets. Financial support for the implementation of a demonstration pilot has been approved in concept by the Robert Wood Johnson Foundation and is being discussed with the State of Wisconsin. A minimum of \$500,000 will be used as seed capital for creating a Self-Perpetuating Loan Reserve Pool that in turn with the Cooperative's or RWHC hospitals' own collateral should support approximately ten individual loans or bonds of \$250,000 each. The loan reserve as used in this pilot will be available for both tax-exempt and taxable situations with the main trade off being that lower tax-exempt loans frequently requiring more paper work .

The Executive Director of the Wisconsin Health and Education Facilities Authority was asked what would be the role of WHEFA in this pool; his response is as follows: "Member hospitals would consult with WHEFA (1) to determine eligibility of the project for tax-exempt financing and (2) to discuss various financing options. After a specific plan of finance is agreed upon, the most advantageous issuer (WHEFA or local issuer (to make bonds bank eligible) is selected, application to that issuer is made, covenants agreed to, and the loan is documented and closed. In order to gain approval for more borrowers and projects, additional collateral for loans can be secured by letters of credit or certificates of deposit obtained via the loan reserve pool. It is assumed that several alternatives for financing will be explored in each case, including local bank loan, pool programs and other private or public bond structures which may be available at the time."

As regards the impact of a loan reserve pool on the ability of RWHC members to get a loan commitment he responded: "While not fully determinable until actual loan applications are received, it is important to assess whether such a loan reserve pool will, in fact allow certain borrowers and projects to obtain financing or obtain improved financing terms. In an effort to make that preliminary assessment, he completed a telephone survey of bank loan officers and investment brokers. He described the enhancement concept and inquired if such a structure would impact their decision to lend. In all instances, the answer was that such a loan reserve pool should allow for additional or more favorable loans to be made. The percentage of the loan needing to be covered would vary."

### **C. Additional Options For Local Rural Health Care**

How can we encourage new rural health care models that don't depend upon a high volume of inpatient care? The promotion of new models less dependent on inpatient care is not to say that this should be the only or even major type of model for rural hospitals - there is a lot good about the current evolving model of rural hospitals that must not be lost in a search for silver bullets or visionaries. Next, I would refer you to a number of suggestions made by Steven Rosenberg in a policy paper recently prepared for the National Rural Health Association:

Create a new Medicare benefit similar to the Medical Assistance Facility currently being researched in Montana BUT recognize that this is not meant as a model that would be appropriate to most or even many communities. It is one of many alternatives that needs to be developed.

Continue the Rural Hospital Transition Grants program.

Create a targeted category of rural providers whose survival is absolutely essential but not in a manner that penalizes rural hospitals that are not deemed "essential."

Require the Health Care Financing Administration to grant waivers to several states to facilitate the development of different kinds of alternative rural facilities.

#### D. Should Reimbursement Dictate Rural Closures?

I'm frequently asked whether or not I believe that it is possible to design a "reimbursement system that will discriminate between those small hospitals which, by all standards, should close, and those that are essential to the community?" My answer remains NO. The closure of a hospital for quality reasons can not and should not be done by a reimbursement system - that is the job of the Professional Review Organizations or its private sector counterparts. To do otherwise accepts an unsupportable perspective that we know now and will always know in the future what a specific hospital service should look like in every county of the country.

The fundamental strength of our health care system, notwithstanding significant problems, is its flexibility to adapt to a continuously changing environment. We need to enhance our capabilities to judge outcomes, and to make judgments based on those outcomes. We do not need arbitrary or uniform rules - health care and our country is too diverse for such an appealing or simple minded approach. What all of us want from health care does not need and will be strangled by a fixed mileage rule or any other like simplification.

#### E. Future Without Additional Medicare Reform?

There a disproportionate burden of proof for rural America and the rural hospitals vis-a-vis urban America and the urban hospitals in proving the inequities of the current Medicare system, even as amended with the FY 1990 Budget Bill. We are largely left with the task of having to prove a negative - that there is insufficient support for the magnitude and distribution of the actual payment differentials.

The weight of the status quo, the inertia of the Health Care Financing Administration and the relative wealth of urban hospitals all stand against a handful of rural voices. Even today, we still struggle with a continual series of misstatements (some deliberate - some inadvertent) about the size of the urban rural differential. Even with recent changes, the difference in the national standardized payment amounts is about 8% with the actual difference including wage index adjustments estimated to continue at over 30%.

We do not doubt the mathematical integrity of HCFA's numbers, only their relevance and appropriate use. (Although the 1989 Fall edition of Health Care Financing Review clearly indicates major technical problems with the use of the wage index in specific rural areas.) Urban hospitals, as a group, made substantial profits on the Medicare in the first 3 to 4 year of the Prospective Payment System - a time when rural hospitals were struggling to break even. Looking at the costs during this period only tells you the obvious, people with money to spend generally spend it, those without, can't spend what they don't have.

The current reimbursement system totally ignores the merger of standards and expectations between rural and urban systems of care - whatever validity existed for past cost differences per DRG, belongs to the past.

The government is accustomed to taking years to address major social problems but this is not an issue of government as change agent. It is an issue of pay discrimination by the federal government for services rendered, the result of which is creating significant social problems and hardship. This is not an issue of how quick the government can provide assistance but how

quickly they must stop doing injury.

The average rural hospital is now losing money after many years of already paring down budgets to stay ahead of federally imposed payment inequities. The fat is well gone. With or without change, you will see an increasing escalation of the rate of closures, some appropriate, many not. The issue is now damage control, not problem avoidance.

A Wisconsin peer group of hospitals, similar to those in the Cooperative (with an average daily census of 30), must allocate approximately 20% of their private revenue to cover charges not paid by Medicare; in addition they must allocate about 8% for charity care /bad debts and 7% for Medicaid short falls. This totals to a "value added tax" of 35% compared to one of 20% or less for the three larger peer groups. There is a substantial competitive disadvantage to most enterprises in most markets that must charge 15% more than its competitors. In addition, there are significant implications re the equitable distribution among private payers of the cost of providing health care to the country's elderly, poor and uninstructed. (See Figure 11.)

#### F. What Else Needs To Be Done?

State and federal health care policy should encourage rural hospitals to meet both local needs as well as those reflected by state and federal policy makers. We need a public policy that is both consistent and flexible, and that will:

**Pay All Hospitals And Physicians Adequately and Equitably** regardless of their geographic location. If the current Prospective Payment System does not work for a class of hospital, it should be modified or replaced before it forces the unplanned closure of hundreds of facilities.

**Hospital Outpatient Services Should Be Paid At Cost** until the impact of including them under a fee schedule is fully understood.

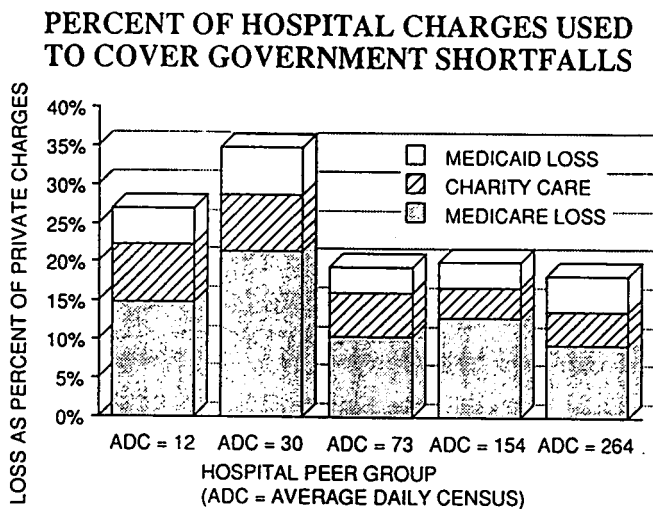
**Develop Increased Local Access** to locally-appropriate and necessary services. Services follow payment. Pay well for organ transplants and organ transplant services will proliferate. Pay well for coordinated, cost effective rural health care and those services will follow.

**Create Immediate Physician Loan Forgiveness Programs;** we can no longer penalize young people for choosing to locate in rural communities - their significant college debt prohibits this as a practical option.

**Provide Loan Guarantees For Appropriate Capital Needs** to bridge the gap between local rural communities and the national capital markets that now dominate the hospital industry.

**Require State and Federal Regulations To Be "Rural Relevant;"** to "make sense" in rural settings - we can have regulations that provide equal protection to the patient while not assuming that all urban models are most appropriate in rural communities.

Figure 11.



SOURCE: RWHC 12/2/88

DATA: WHA Prelim. 3Q 1988 IMS Report

**Encourage New Rural Health Care Model Development** that does not depend on a high volume of inpatient care for survival and that provides an option for rural hospitals no longer able to sustain, under the best of conditions, an inpatient service.

**Find Ways to Keep Medicare Part A Dollars in Rural Communities** to support other vital health services in the event a hospital does close.

Obviously, not all hospital closures have bad outcomes for rural health or the rural economy. Many closures, however, may seriously compromise the health care access of Medicare beneficiaries and other rural residents who have no other place to go for service that is within reasonable a driving time. The closure question is not *will* rural hospitals close, or even, *should* hospitals close? The questions is more appropriately are the "right" hospitals closing and how is the decision being made? Will there be a net benefit or cost to the local community as a result of the closure? Unfortunately, rural hospital closures are too often the result of bad luck or inadequate investment rather than lack of need - the health care and economic outcomes are almost entirely ignored, except by the rural communities themselves.

Thank you for the opportunity to testify and especially for your critical interest and support.



Representative HAMILTON. Thank you very much, Mr. Size. Mr. Adams, please proceed.

**STATEMENT OF ORVILL B.R. ADAMS, DIRECTOR, DEPARTMENT OF MEDICAL ECONOMICS, CANADIAN MEDICAL ASSOCIATION, CANADA**

Mr. ADAMS. Thank you, Mr. Chairman, for the opportunity to come and provide some information, and the opportunity, also, to learn.

Over the past little while, I've had some chance to speak to a number of audiences from the United States, and each time, I take back something that I believe is valuable, and a question that I need to sit down and try to resolve for myself. I hope, today, to be able to answer some questions, and to learn something.

What I intend to do is to give you a brief overview of some of the initiatives and programs that are in place within the Canadian health care system to try and address issues of access to rural health care.

Our health care system is based on a number of fundamental principles. One of those fundamental principles is access to care. That means the question of access for a rural population to health care is not a question at all. Rural health care rural recipients should have the same access as the urban recipients. It's really a question of whether or not the resources are there to provide those services in the rural area, or whether or not it's a matter of convenience to be able to move people from the rural area to the urban setting.

Primary health care services, as my colleagues here today have mentioned, are important services to have in the rural area. And I think our system has been designed, or the initiatives have been designed to try and move physicians to those areas to try and at least be able to provide that primary health care service.

Across Canada, we have 10 Provinces, two territories, and they're responsible for administering health care services on a Provincial basis. The Federal Government is responsible for transfer payments to the Provinces and also for assisting in the care for some of the status Indian populations, our Inuit populations, and our armed forces. You'll find across the country not only 12 or 13 different models but, within each Province, a variety of models within the Provinces, themselves.

There are three basic programs designed to address rural distribution of physicians. The programs address three particular areas; legislative programs that attempt to provide incentives through legislation for physicians to settle in rural communities. Those programs have not been successful programs, in our view. One of them was challenged under our charter of rights and defeated.

The second, a major program is predominant in the Province of Quebec where physicians are paid a premium for practicing in rural areas, and receive less than the base salary or the base fees for practicing in the urban center. General practitioners, for example, in the Province of Quebec, receive, for the first few years of their practice, 70 percent of the base income if they practice in an urban setting, and as much as 125, 130 percent if they practice in

the setting that has been designated as a rural area. We found that particular program has been successful for general practitioners, but not successful for specialists.

The third category of programs are designed to try and encourage medical students to move to rural areas. Those programs will bursar students to rural areas and provide bursaries for setting up a practice in rural areas. We found that those programs have been partially successful.

Other alternatives, initiatives that are in place right now, touch on some of the points that my two colleagues discussed; initiatives of regionalization of rural health services.

There hasn't been a rural hospital closed in Canada, I don't think. Closing hospitals in Canada is a major political problem. There's a celebrated story of one health minister in the Province of Ontario who closed one hospital and soon found himself out of office.

Rural hospitals have been converted to long-term care homes because, in many of our rural areas, we find that the elderly population makes up a significant proportion of the local population. The model that we look to the future for, I believe, and that's being tried in at least two Provinces in a major way, is a model where small rural hospitals are linked into a base hospital and then linked into a major regional hospital system. The base hospital provides the secondary care, and the tertiary care is provided in the regional hospital center.

Physicians are sensitive to and, I think, quite comfortable with that kind of arrangement, inasmuch as it provides them with the support that they need for emergency care services. Part of the reason, we found, why physicians aren't willing to move and settle and practice in rural areas is because of their sense of isolation. Apart from all the social aspects, but the medical aspect, particularly, is their sense of isolation having to deal with a difficult problem without the support services. The major initiatives that are being put in place are intended to try and alleviate that particular problem by either setting up group practices within rural areas and supporting them with the base and the regional communication systems.

Other things that are being put in place are better regional hospital transportation systems, helicopter systems, plane systems, and also telecommunications systems. Support through telecommunications has become a major part, especially for remote health care services.

There's just so much to say about the different kinds of programs and the different kinds of things that are happening within the system that I think, for your purposes, it would be much better if I in fact answer specific questions about the things that are in place.

[The prepared statement of Mr. Adams follows:]

## The Delivery of Rural Health Services In Canada

The national health insurance system in Canada is based in two pieces of federal legislation: *The Hospital Insurance and Diagnostic Services Act, 1957* and *The Medical Care Act, 1966*. The 1957 legislation focuses on financing for hospital inpatient care and diagnostic services. The 1966 act is concerned with universal coverage for the population for physician services. All ten Canadian provinces and both territories were participating in the national hospital plan by 1961 and in the national medical program by 1972.

Under Canada's Constitution, health is a provincial responsibility, placing the administration of the hospital and medical care plans within the provincial government's jurisdiction. The Territorial governments of the Yukon and Northwest Territories also administer their programs. The federal government, however, has been and continues to be instrumental in the organization of the health care system through legislation and transfer payments to the provinces. To be eligible for financial contributions the provinces are required to meet five program conditions or national standards: portability, accessibility, public administration, comprehensiveness and universality.

**Portability** of benefits is intended to ensure that residents of Canada travelling from one province to another are eligible for and entitled to insured health services.

**Accessibility** to the health care insurance plan of a province must provide:

- insured health services on uniform terms and conditions and on a basis that does not impede or preclude, either directly or indirectly, whether by charges made to the insured persons or otherwise, reasonable access to those services by insured persons;
- payment of insured health services in accordance with a tariff or system of payment authorized by the law of the province;
- reasonable compensation for all insured health services rendered by medical practitioners or dentists; and
- the payment of amounts to hospitals, including hospitals owned or operated by Canada, in respect of the cost of insured health services.

**Public Administration** ensures that insured benefits are administered on a nonprofit basis by a public authority appointed or designated by the government of the province.

**Comprehensiveness** requires that the health care insurance plan of a province insure all insured services provided by hospitals, medical practitioners or dentists and, where the law of the province so permits, similar or additional services rendered by other health care practitioners.

**Universality** requires that the health care insurance plan of a province entitle one hundred percent of the insured persons of the province to the insured health services provided for by the plan on uniform terms and conditions.

*The Canada Health Act, 1984*, from which the above criteria are taken, penalizes a provincial health care system that allows physicians to bill patients above the provincial benefit schedule. If a

province permits this practice, it suffers dollar-for-dollar penalties i.e. reductions in federal transfers equal to the estimated amount of billings above the benefit schedule. Accessibility to health care is a valued concept of the Canadian health care system. Consequently, questions of physician distribution and access to medical care services in rural and remote areas are of concern to a number of stakeholders within the system: policy makers, providers and consumers. The Canadian population (as of July 1989) is estimated as 26,247,800 persons (Statistics Canada, 1986). Census data for 1986 indicate that 23.5% of the total population were rural dwellers. (Statistics Canada defines "urban" as an area with a population density of 400 persons per square kilometre with at least 1000 people. "Rural" is everything not urban). In contrast, 10.4 percent of physicians in Canada in the same year were engaged in rural practice.

The availability of physicians and their distribution has been viewed by researchers and policy makers alike as "of prime importance in the context of accessibility" (Anderson and Rosenberg, 1988 p. 44).

Dupont and Flor, officials in the Department of Health and Welfare Canada, argue that despite increasing growth in physician supply, "a major issue yet to be resolved is the continuing problem of meeting the needs for physician services in underserved areas". They stress the concerns of the elected officials by stating that the Minister of Health in Manitoba identified the shortage of doctors in rural Manitoba as one of the most serious problems facing the health care system. This sentiment, the commentators suggest, is shared by most, if not all, provincial Ministers of Health and their federal counterparts (Dupont and Flor 1988 p. 21).

There are a number of particular reasons to be concerned about access to rural health care services. A Canadian study which examined health expectancy in Canada by community size, found that for each sex, health expectancy "is clearly higher in the largest urban areas (Montreal, Toronto and Vancouver) than elsewhere in Canada". This was found to be true for the measures; overall life expectancy, disability, free life expectancy, or quality adjusted life expectancy. The study reports that, for both sexes together, the quality adjusted life expectancy is 67.4% in rural areas, 68.0% in towns of one to ten thousand persons, about 68.5% in other urban areas with a population of up to one million and 70.6% in the largest cities. A number of factors are suggested as possible contributing variables in explaining the variations. Among them are: income, education, occupation of residents, differing levels of service and self-selection of individuals (Wilkins and Adams 1985 p. 92).

The other factor of concern is the fact that Canada's population is ageing. In 1981, just under 10% of the population was aged 65 and older. This is projected to increase to about 13% in the year 2001 and 18% by the year 2021 (Canadian Medical Association 1987). More than one third of the elderly in 1981 lived in rural areas or small towns (Joseph and Cloutier 1988). Data from the province of Saskatchewan indicate that increasing proportions of both rural and urban populations are elderly but that the elderly comprise a higher proportion of the population in rural areas (Phillippon 1985). The Canadian Medical Association's study of health care of the elderly in Canada stated "that easily accessible, permanent and high-quality medical services are of special importance to the elderly. Younger more mobile segments of the rural population can and do seek medical attention in distant

cities and towns, but the elderly rely heavily on the local doctor for medical services" (Canadian Medical Association 1987 p. 30). Physician availability is, therefore, important to the elderly. The rest of this paper will be primarily focused on questions of physician maldistribution and some of the contributing factors and programs that have been designed to reduce the problem.

Data from the 1986 Physician Manpower Questionnaire Survey are presented in Table I. It can be seen that the proportion of physicians engaged in rural practice varies quite markedly across the country. The provinces of Newfoundland, Prince Edward Island, Nova Scotia, New Brunswick and Saskatchewan have demonstrably higher proportions of physicians in rural practice.

The majority of physicians in rural and remote areas in Canada, especially in the smaller provinces, are graduates of foreign medical schools. In 1986 and 1987, for example, a total of 843 physicians entered Canada (417 in 1987 and 426 in 1986) to practise medicine. Of this group, one third (286) were recruited to fill positions for which there were no Canadians available or to fill positions which Canadians were not willing to accept (Employment and Immigration Canada 1988). The vast majority of these positions were in rural and remote areas.

As concerns about physician oversupply have been voiced by governments, both the medical profession and government have supported efforts to reduce the country's intake of foreign physicians. Dupont and Flor correctly argue that as long as Canadian physicians are unwilling to accept rural or remote positions, it can be expected that to meet service needs, physicians from other countries will be actively recruited to fill them.

A study of access to medical services in remote regions in the province of Quebec suggests that "despite the rapid growth of medical manpower during the 1970s, equitable access to medical services for Quebecers as a whole does not seem to have been guaranteed" (Contandriopoulos and Fournier 1987 p. 59). Equitable is defined by the researchers as the possibility for all Quebec residents, whatever their capacity to pay and the region where they live, to have access to the medical services which their state of health requires.

The study, recognizing that physician population ratios do not differentiate between the type of physician delivering the service or the population consuming the service, developed a population services ratio. This measure attempted to more accurately indicate the differences in services utilized per capita by region by controlling for mobility across regions by physician and consumer, age, sex factors and variations in physicians' workload.

The study concluded that equity of access continues to be a problem in Quebec. However, the regional disparities are less when the service utilization ratio is employed. General practice services were found to be more or less equitably distributed. Specialist services exhibited much less equitable distribution. This study asks some interesting policy questions that will be addressed later in this paper.

Two other Canadian studies have results that suggest that physician population ratios only are not appropriate for measuring disparities between communities and their access to medical care. John Horne, investigating shortage areas in rural Manitoba, used utilization rates of medical services and profiles of cost and service use to measure access. The study found that "access to and use of publicly

insured medical services among rural communities with nominally low access to physicians is not substantially below or otherwise at serious variance with similarly sized communities in the same regions with established and apparently stable medical practices" (Home 1986 p. 25).

A study of the effective supply of physician services in British Columbia argues that a measure of accessing geographic maldistribution should take into account inter-regional sharing of clinical capacity. The study found significant difference in effective distribution. However, it is argued that some physicians, especially in tertiary centres, must be considered a regional resource if not a provincial resource. The researchers further argue that, although not perfect, age-sex adjusted expenditures per capita go farther as a measure of regional disparity in access or need-servicing capacity than actual physician practitioners capacity (Barer *et al.* 1983).

The three studies referred to above suggest that different approaches in accessing equitable distribution and access to medical services need to be examined. They also highlight the need for clear objectives for the delivery of rural health care services. The definition of equitable used in the Quebec study does not require that a physician be physically present in an area. It requires that individuals are able to obtain necessary health services within appropriate guidelines. Different methods may be found to ensure access (i.e. transportation system, air ambulance, telecommunication support systems, delegation of medical acts supported by telecommunications, etc.).

The following discussions are based on findings of studies and programs which primarily use physician population ratios as the measure of maldistribution:

#### **Factors Affecting Physician Location Choice**

There are a number of factors that affect the location choice of physicians. It is important to note that physicians in Canada are free to make their own location decisions. Legislative attempts to direct physicians to practise in particular areas of the country have not met with success.

Under the health care system in all provinces and territories, a physician must have a billing number to be able to claim remuneration from the provincial health insurance plan. In 1985 the province of British Columbia used this fact when it passed the *Medical Services Amendment Act*, (Bill 41). This legislation attempted to restrict the growth in the size of the physician population and direct physicians' location decisions by permitting the issuance of billing numbers only to physicians who settle in specific areas. In 1988, after two years of court challenges by the medical profession, the legislation was deemed unconstitutional by the British Columbia Court of Appeal. The decision concluded "*The Medical Services Amendment Act*, 1985, and the impugned regulations made pursuant to it, which exclude the appellants from the opportunity to practise their profession as physicians in open competition with all other doctors in British Columbia, and which exclude the appellants from the opportunity to provide medical services to patients everywhere in the province, have the effect of depriving them of 'liberty' within the meaning of Section 7 of the Canadian Charter of Rights and Freedoms" (Court of Appeal 1988). (Section 7 states "Everyone has the right to life, liberty and security of the person and the right not to be deprived thereof except in accordance with the principles of fundamental justice". Part I of the *Constitution Act 1982*, c. 11, Schedule B.)

In June 1986, the province of Quebec passed Bill 75. This Bill was intended to reduce the number of specialists in the urban areas and increase the number in more rural regions. Medical manpower plans are required for each of the health regions of the province. These plans must then be approved by the Ministère de la Santé et des services sociaux. If the plans do not require a particular type or number of physician, physicians will be discouraged from settling in that region. These measures have not been fully implemented, so it is too early to comment on the operation or effectiveness of this program.

The impediments to rural practice can be summarized: isolation from professional colleagues and lack of educational opportunities, work conditions, social and cultural conditions, and related conditions (Dupont and Flor 1988; Anderson and Rosenberg 1988; Landry et al 1982).

A number of studies argue that physicians in rural areas often find themselves faced with a level of responsibility that is higher than their education has prepared them for. This isolation and potential lack of appropriate education places physicians at risk and increases their level of stress. Some physicians choose to avoid this by locating in urban areas. Rural physicians also face high costs in time and money to ensure continuing medical education appropriate to their rural practice.

Some rural physicians are overworked due to their role as either sole practitioners for their area or the sole specialist among general practitioners who do not share their skills. These physicians may find themselves on call continuously, contributing to burnout in a relatively short time. Physicians in this situation find it difficult to leave the rural area for holidays, education experience and even emergency family problems. The lack of medical resources, especially access to medical technology, is of concern to rural physicians as they attempt to provide quality health care.

The third factor is a group of social and cultural conditions: Lack of adequate housing, and limited social and cultural amenities. Physicians are concerned that the rural communities' education systems may not be adequate for their families. The dissatisfaction of spouses has long been cited as a factor constraining the movement of physicians to rural areas. As the number of two-career families increases, their concern may increase.

Other factors regarded as posing a barrier to rural physicians include a greater potential for a more favourable income-leisure trade-off in urban areas. The increasing number of women in medicine is also listed as a factor (Dupont and Flor 1988). This assumes that female physicians will be less likely than their male counterparts to seek practice opportunities in rural areas. Results from the CMA Physician Manpower Questionnaire Survey provide data indicating that 17% of physicians in rural practice are female (Table II).

### **Programs Designed to Address Location Decisions of Physicians**

There are essentially four types of programs; legislative or administrative programs, incentive programs and bursary programs and educational programs. Legislative programs were discussed briefly in the previous section. Health and Welfare Canada reports that bursary programs in 1988 were available in all provinces except for Prince Edward Island and British Columbia. The programs in the

provinces of Saskatchewan, New Brunswick, Newfoundland, Nova Scotia and the Yukon are directed to postgraduate residency training programs. The other provinces of Ontario, Manitoba, Alberta and the Northwest Territories provide bursaries for both undergraduate and postgraduate students. Medical students receiving bursaries are required to provide return-in-service for specific periods of time.

An example of a bursary arrangement and the return of service is the medical resident's bursary program in Newfoundland. The program provides assistance to senior medical residents in the amount of \$9,000 (1986 dollars) a year for the final two years of a training program leading to a fellowship certification in a clinical specialty. The return-in-service to the province is required for at least the number of years for which assistance is received. Seven positions are available for the specialty areas that are identified as being in shortage.

The province of Quebec provides another example of a bursary program. The four categories of bursaries are identified as follows:

- Category A: an allowance of \$25,000 to a student who is completing his/her last year to achieve licensure or is in the second year of training in family medicine, provided that the student has never received a bursary from the Ministère de la Santé et des Services Sociaux before;
- Category B: an allowance of \$10,000 to a student completing his/her last year to achieve licensure or who is in the second year of family medicine;
- Category C: an allowance of \$10,000 to a student who is enrolled in the last year of medical school; and
- Category D: an allowance of \$10,000 to a student who is enrolled in the year preceding graduation from medical school.

Since 1985, the Ministère de la Santé et des Services Sociaux may award up to 180 bursaries, with a maximum of 30 in Category A.

Medical students receiving Category A bursaries must commit themselves to return-in-service for three years. Those in receipt of the other category bursaries are required to provide services for a number of years equal to the number of bursaries received. A bursary recipient who does not meet his/her obligation must reimburse the sum received with interest pro-rated according to the time that has not been spent in the region.

The Quebec program between the years 1978 and 1985 awarded 190 bursaries to physicians for underserved regions. Data for 1981 and 1983 indicate that 53% of all physicians established in underserved regions were from bursary programs. A 1987 report of the Federal/Provincial Advisory Committee on Health Human Resources indicates that between 1978 and 1981 the return rate of bursary physicians locating in such areas was 54%.

Financial incentive programs for practising physicians to move to rural, remote or underserved areas take different forms across the country. The measures include; differential remuneration, remuneration and social benefits in isolated regions, settlement grants, and other financial incentives.

The provinces of Quebec, Ontario and Saskatchewan present examples of financial incentive programs. The province of Quebec has employed differential remuneration measures since 1982. The



government has identified designated shortage areas in the province. General practitioners receive 115% above the base negotiated fee schedule to work in these areas. If a general practitioner chooses to work in a non-designated area, he/she will receive 70% of the base fee. Specialist physicians receive 120% of the base fee, regardless of their method of remuneration if they settle in a designated shortage area. Specialists also receive 70% of the base fee if they settle in non-designated areas. These measures apply to all physicians for their first three years of practice. The government has identified exclusions to these groups. The program also provides for annual isolation allowances (1987) varying from \$3,179 for a physician without dependents to \$10,849 for a physician with dependents. Paid travel and moving expenses are also available.

The differential remuneration measure in Quebec has had some influence on the geographic distribution of general practitioners but not specialists. Contandriopoulos et. al. state "one notices that while geographic distribution of general practitioners is relatively standardized among the different regions, it is not the same for the specialists. For the latter, the interregional gaps have become more accentuated rather than less pronounced" (Contandriopoulos et. al. 1987 p. 61).

Ontario's Underserved Area Program (OUAP) has been well studied in Canada. The program provides for a financial incentive and a bursary program to encourage doctors and dentists to establish practice in 214 communities designated as underserved. The program was established in 1969 following an increasing number of complaints about a lack of physician services from residents of northern communities (Anderson and Rosenberg 1988; Federal/Provincial Advisory Committee 1987).

To be eligible a physician must have a valid Ontario licence to practise and must be a Canadian citizen or landed immigrant. The physician must also be approved by a selection committee. The OUAP works cooperatively with local municipalities in shortage areas. The municipality is responsible for ensuring that adequate facilities and housing are provided for recruited physicians. The OUAP receives approximately 66% of its funding from the Ministry of Northern Development and Mines. The federal and provincial governments and the local communities provide the remainder of the funds.

Physicians recruited for northern Ontario have a choice between a minimum guaranteed net income of \$38,000 per year, or an income tax-free incentive grant of \$10,000 a year for a maximum of four years.

Southern Ontario areas designated as underserved must go a year without being able to recruit a physician before financial incentives are provided. In 1987 the program offered a contract with a minimum guaranteed net income of \$28,000 per year or an income tax-free incentive grant of \$15,000. This incentive grant is paid to the physician in stages – \$6000 in the first year and \$3000 in the next three years. In 1987 there were 527 physicians working in the OUAP. The Ontario government stated that "the above-cited numbers of health care professionals in the Underserved Area Program today are evidence of its success. The program has played a major role in improving the supply/distribution of health care professionals in underserved areas" (Federal/Provincial Advisory Committee 1987).

Anderson and Rosenberg attempted to assess the effectiveness of the OUAP and concluded that:

1. more physicians are now practising in northern Ontario than there were before 1969;
2. there is no way of knowing if there would be more, fewer or the same number of physicians in the absence of the program;
3. northern Ontario continues to have shortages in specialties such as psychiatry, obstetrics, orthopedic surgery, anesthesia and dermatology; and
4. compared to southern Ontario there does not appear to be much improvement in physician accessibility.

The study also suggests that quality of life measures need to be considered in addition to financial ones.

In 1979 the Medical Practice Establishment Grant Program was initiated in Saskatchewan to encourage Canadian-trained physicians to locate in rural areas. As in Ontario, there is local community involvement. The Saskatchewan Department of Health will match community funding to a maximum of \$15,000 (the 1987 level) to recruit a Canadian-trained physician in a designated shortage area. Physicians receiving the lump-sum payment are expected to give a one-year commitment for each \$5000 received. Between 1979 and the 1983/84 fiscal year only nine grants had been awarded.

#### **Education approaches to rural health care**

The education system and rural education experiences have been identified as key variables contributing to the non-urban choice of practice by physicians (Carter 1987; Longhurst 1987). A number of provinces -- Quebec, Ontario, Manitoba and Saskatchewan -- have adopted the thesis that if medical students are exposed to rural training experiences the probability of those students returning to practise in those areas is higher. Consequently, these provinces support programs such as Quebec's decentralization of medical training. The program, begun in 1985, organizes summer sessions for medical students in the first three years of their courses, for students doing their clerkship during the last year of medical school and for interns and residents in family medicine training.

The Ontario Ministry of Health and McMaster University fund the Northwestern Ontario Medical Program. In 1989 the Ministry's share of the program was approximately 88%. The grant is administered by McMaster University but it includes students from each of the five medical schools in Ontario. The NOMP has four major objectives, outlined by Dr. Neelands, the chairman of NOMP, in 1989:

- To develop a network of community-based clinical teaching practices to provide medical students and residents with the opportunity to experience health care in a remote northern setting;
- To provide educational enrichment to local health professionals;
- To encourage physicians to establish practice in rural and remote communities in Ontario and Canada; and
- To encourage northwestern residents to seek careers in the health professions (done by giving geographical weighting preference to northwestern Ontario applicants for admission to the McMaster medical school).

Although the educational enrichment quality of the program for local physicians has not been formally evaluated, Neelands suggests that intuitively, a network of active teaching practices should make the region a more desirable place in which to practice medicine (Neelands et al. 1984). A recent review of the NOMP showed that 708 physicians went through the program in the period 1972-84. Of the 640 who could be tracked, it was found that 29% had at one time established a rural and/or remote practice. Subsequently, 7% moved from the rural and/or remote areas.

The review suggests that only a few students from northwestern Ontario who received preferential status at McMaster returned to practise in a rural or remote area.

This last finding is contrary to evidence cited by Carter in 1988. Carter reviewed seven studies comparing the personal characteristics of physicians practising in rural areas. He concluded that there is a "significant" relationship between being raised in a rural area before high school graduation and eventual location in rural practice upon completion of medical training.

Carter's findings have prompted the Canadian Medical Association to recommend medical career presentations to high school students in rural areas. A recent invitational meeting on rural physician supply in Manitoba made a similar recommendation (Manitoba Medical Association 1989).

Other educational initiatives recognize that special knowledge is needed for rural/remote practice. Physicians in rural and remote areas often must be more of generalist than a subspecialist. Individual physicians in these smaller communities must provide a range of services not done by their urban counterparts. Studies in Manitoba and Ontario (Carter 1987; Rourke 1988) find that the rural general practitioner must also be able to provide services in emergency medicine, general surgery, obstetrics and anesthesia. Training programs that require mandatory rural rotations of three to six months are being discussed by the medical associations and the medical teaching establishment.

The province of Quebec "twinning system", introduced in 1984, links urban teaching hospitals to smaller non-urban hospitals. Interns and residents can therefore be trained in a rural hospital while being part of the university teaching program. The program has yet to be evaluated.

Family medicine programs in a number of provinces have established rotations in rural locations for their residents.

Continuing medical education programs for physicians already located in a rural setting are extremely important. A physician who believes his or her skill level is weakening is less likely to stay in a rural area without support. The Alberta Medical Association's 1989 "Report of the Task Force on Rural Medical Care" agreed with the necessity of continuing medical education (CME). It pointed out, however, that travel to other locations for CME is difficult because of the lack of locum physicians. The rural physicians of the Task Force suggest the development of a registry of locum physicians. The report also supports further development of teleconference programs, database networking and special visits by specialists.

Developing sound programs to encourage physicians to practise in rural areas requires the cooperation of the communities to which the physician is to go, physician organizations, the medical

education establishment and government. The development of a support system for the recruited physician is essential. The physician practising as a solo practitioner must have access to specialists. In Calgary, for example, the Foothills Hospital and the Calgary General Hospital have toll-free numbers which serve as single entry points for physicians in need of emergency services in a variety of specialties. The Alberta Medical Association Task Force sees this service as a valuable one that should be available to all hospitals accepting rural patients in transfer. The Alberta Task Force has recommended that a 24-hour emergency access telephone hotline be established.

### **Alternatives**

Alternatives to ensuring access without there having to be a physician in each rural, remote or designated underserved area are being seriously considered by a number of provincial governments in Canada. Chief among them are the provinces of Quebec and Saskatchewan. The concept of regionalization of rural small hospitals and physician services is being proposed and experimented with. Saskatchewan provides a good example of this initiative. A report of the Minister's Advisory Committee on Rural Medical Practice in Saskatchewan (Philippon 1985) stated that (community) expectations of having a resident physician in most rural communities are unrealistic because of substantial improvement in rural road networks. The committee suggests that a rural resident ten miles from a physician may, in fact, find it quicker and easier to obtain medical services than a resident of Regina or Saskatoon who has to drive to the doctor's office or the nearest hospital.

The regional hospital concept is designed to reorganize rural medical and hospital services based on group affiliations. The key elements are as follows:

- the voluntary grouping of a number of communities, hospitals, and physicians to form a group that would collectively serve the medical and hospital care needs in the area;
- one hospital in the group would be designated as the centre for most acute care services. The other hospitals would retain some acute care functions and would also provide a combination of emergency services, out patient services and long-term care; and
- physicians participating in the group would have privileges at all the hospitals involved.

This model is expected to diminish the requirement for a physician in each community for the local small hospital for it to provide a viable range of services. Small hospitals in Saskatchewan have been forced to close temporarily when the physician leaves the community. The impact of this is far greater than the loss of medical services. The small rural hospital continues to be a significant source of employment for some communities. The province of Saskatchewan in 1987 had a total of 133 hospitals, consisting of:

- 6 base hospitals in the two larger urban cities of Regina and Saskatoon,
- 7 regional hospitals,
- 7 large community hospitals (60 beds and over),
- 32 small community hospitals (29-59 beds),
- 81 rural hospitals (under 29 beds).

Saskatchewan, with a total of 7,100 acute care beds, in 1987 experienced the highest bed per population ratio in Canada (7 beds per 1,000 population) (Schwartz 1987). A number of problems of

rural hospitals have been identified. These include the inability of rural hospitals to attract physicians, lack of trained technical staff, lack of specialized services such as: intensive care units, critical care units, physical therapy and social services. The lack of co-ordination of medical services delivered by different levels of hospitals has also been identified as a problem. It is hoped that a reorganization of the system to allow for decentralized decision making while developing regional services will allow for a more efficient and effective delivery of not only medical but health services in Saskatchewan. Although the basic structures of such a system has been developing in Saskatchewan since 1984, the necessary linkages and management has not been established. A 1986 report on the role of the regional hospitals in Saskatchewan suggest that there needs to be careful definition of the role of regional hospitals, the populations they serve, their referral base and their limitations (Murray and Warren 1986). Physicians and communities are concerned that regionalization of services will result in a reduction of local services. Evidence from Alberta suggest that while regionalization of basic surgical, obstetrical and emergency services currently provided in rural areas will be resisted by the medical community, they will be willing to support regionalization of diagnostic, radiologic, and pathologic services.

### **Conclusion**

The need to improve access to rural medical and health services is recognized by all governments, professional groups and rural communities in Canada. The optimal way to achieve this has escaped us all to date. I have only presented some of the many programs and initiatives that are being used. All of them can claim some measure of success. The provision of rural health services has been traditionally treated as a separate problem from the rest of the health care delivery system. This view is changing, planning for the delivery of health service to rural populations is increasingly being placed in the overall context of planning health services for the whole population. As urban services are reorganized (e.g. the amalgamation of hospitals, the organization of HMO like Comprehensive Health Organizations, CHOs), there is a recognition that the needs of rural communities, sometimes hundreds of miles, away must be incorporated in the planning.

It is encouraging that in the past year there have been a demonstrated increase in the search for solutions. Provincial governments have established joint working groups with the medical profession and conferences are being planned for 1990. There will be a need to expand working groups to include other health care professionals and consumers. Changes in the way rural health services are provided will require the support of all concerned groups.

André-Pierre Contandriopoulos and Marc-André Fournier conclude from their investigation of access to medical services in remote regions in Quebec that policies which have been established to encourage (or constrain) physicians to set up practice in remote regions should be re-examined. They ask the following:

"Shouldn't the question of distribution of medical manpower be reformulated in terms of equity of access to medical services? And within the perspective, shouldn't it lead to a discussion about all the ways which make it possible to improve accessibility without penalizing either the physician or the population?" (Contandriopoulos et al. 1987)

All provinces in Canada are currently examining the structure, organization and objectives of the health care delivery systems they administer. The delivery of rural health service will remain one of the crucial issues.

Table I -- Distribution of physicians by practice location and province of practice\*

Province of Practice	Urban	%	Rural	%	Total
Newfoundland	425	70.36	179	29.64	604
Prince Edward Island	116	78.91	31	21.09	147
Nova Scotia	993	79.70	253	20.30	1246
New Brunswick	578	78.64	157	21.36	735
Quebec	7278	89.63	842	10.37	8120
Ontario	12027	92.95	912	7.05	12939
Manitoba	1190	87.70	167	12.30	1357
Saskatchewan	873	81.21	202	18.79	1075
Alberta	2364	86.34	374	13.66	2738
British Columbia	4325	92.06	373	7.94	4698
Northwest Territories/ Yukon	33	70.21	14	29.79	47
<b>Total</b>	<b>30202</b>	<b>89.60</b>	<b>3504</b>	<b>10.40</b>	<b>33706</b>

Source: Canadian Medical Association Physician Resource Databank  
1986 Physician Manpower Questionnaire Survey  
December 1989

\* includes full-time, part-time and semi-retired cases only

Table -- II Distribution of physicians by practice location, gender and province of practice\*

Gender and practice location	Province of practice														Total											
	NF		NS		PE		NB		PQ		ON		MB				SK		AB		BC		MT		YK	
	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%
Male																										
Rural	150	24.8	217	17.4	29	19.7	136	18.5	690	8.5	787	6.1	155	11.4	184	17.1	324	11.8	320	6.8	8	40	4	14.8	3004	8.9
Urban	348	57.6	830	66.6	100	68.0	502	68.3	5984	73.7	9944	76.8	985	72.6	750	69.8	1962	71.7	3629	77.2	4	20	17	63.0	25055	74.3
Subtotal	498	82.4	1047	84.0	129	87.7	638	86.8	6674	82.2	10731	82.9	1140	84.0	934	86.9	2286	83.5	3949	84.0	12	60	21	77.8	28059	83.2
Female																										
Rural	29	4.8	36	2.9	2	1.4	21	2.9	152	1.9	125	1.0	12	0.9	18	1.7	50	1.8	53	1.1	2	10	0	0.0	500	1.5
Urban	77	12.7	163	13.1	16	10.8	76	10.3	1294	15.9	2083	16.1	205	15.1	123	11.4	402	14.7	696	14.8	6	30	6	22.2	5147	15.3
Subtotal	106	17.5	199	16.0	18	12.2	97	13.2	1446	17.8	2208	17.1	217	16.0	141	13.1	452	16.5	749	15.9	8	40	6	22.2	5647	16.8
Total	604	100.0	1246	100.0	147	100.0	735	100.0	8120	100.0	12939	100.0	1357	100.0	1075	100.0	2738	100.0	4698	100.0	20	100.0	27	100.0	33706	100.0

Source: Canadian Medical Association Physician Resource Databank  
 1986 Physician Manpower Questionnaire Survey  
 December 1989

\* includes full-time part-time and semi-retired case only

## **Selected Bibliography**

- Alberta Medical Association: **Report of the Task Force on Rural Medical Care**, 1989
- Anderson M, Rosenberg M: Ontario's Underserved Areas Program revisited: An Indirect Analysis. In **Proceedings of the Third International Symposium in Medical Geography**, Queen's University, Kingston, 1988, p.44
- Barer ML, Fung PW, Hsu D: **Referral Patterns, Full-time-equivalents and the "Effective" Supply of Physician Services in British Columbia**. Presented at the Second Canadian Conference on Health Economics, Regina, Saskatchewan, September 9-11, 1983
- Beaudoin G, Ratushny E (eds): **The Canadian Charter of Rights and Freedoms**, Second Edition; Ottawa, 1989
- Carter R: Training for rural practice: What's needed? *Can Fam Physician* 1987; 33: 1713-1725
- Contandriopoulos AP, Fournier MA: Access to Medical Services in Remote Regions: Myth & Reality. GRIS, Faculty of Medicine. In **Physician Manpower in Canada: Proceedings of the First and Second Annual APMC Physician Manpower Conference**, 1987
- Department of National Health and Welfare, Federal/Provincial Territorial Advisory Committee on Health Manpower: **Physician Manpower in Canada, 1980-2000**, Ministry of Supply and Services, Ottawa, 1985
- Dupont J, Flor L: Measures to Improve Physician Distribution in Canada: Provincial Initiatives. In **Proceedings of the Third International Symposium in Medical Geography**, Queen's University, Kingston, 1988, pp. 21-28
- Federal/Provincial Advisory Committee on Health Human Resources: **Bursaries and Incentive Programs for Health Professionals in Canada: 1986, 1987**
- Health Care for the Elderly: Today's Challenges, Tomorrow's Options**, Canadian Medical Association, Ottawa, 1987
- Horne JM: Searching for Shortage: A Population-based Analysis of Medical Care Utilization in "Underdoctored" and "Undoctored" Communities in Rural Manitoba. Presented at The Third Canadian Conference on Health Economics, University of Manitoba, 1986
- Joseph A, Cloutier D: A Framework for Modelling the Consumption of Health Services by the Rural Elderly. In **Proceedings of the Third International Symposium in Medical Geography**, Queen's University, Kingston, 1988, pp. 78-90
- Landry LP, Berlinguet M, Levy D: **Accessibilité a des soins médicaux de qualité dans les régions périphériques**. Etude de cas Rouyn-Noranda et la région 08, Ministère des affaires sociales, Québec, 1982
- Longhurst M: Training for Rural Practice: What is the Core Curriculum? *Can Fam Physician* 1987; 33: pp. 2763-2767
- Murray RG, Warren DD: Role of the "Regional Hospitals" in Saskatchewan, December 1986



**Neelands PT, Geroux M, Maurer P: The Northwestern Ontario Medical Programme (NOMP): The First Fifteen Years. Unpublished paper presented to the APMC Physician Manpower Conference, Winnipeg, October 1989**

**Philippon DJ: Report of the Ministers' Advisory Committee on Rural Medical Practice, Regina, 1985**  
**Proceedings of the Invitational Meeting on Rural Physician Supply, Manitoba Medical Association, Winnipeg, September 16, 1989**

**Rourke J: Medical Manpower Issues for Small Hospitals, Ontario Medical Review, September 1988 pp. 17-23**

**Schwartz EI: Role of Rural Hospitals, Saskatchewan Department of Health, December 1987**

**Statistics Canada: 1986 Ontario Census Table 8, p. 8.1 Catalogue No. 192 114**

**Wilkins R, Adams, O: Healthfulness of Life, The Institute for Research and Public Policy, Montreal, 1985**

Representative HAMILTON. Thank you, Mr. Adams.

All of your prepared statements, of course, will be included in the record in full.

We'll turn, now, to questions.

Let's just begin with the question of quality of care. Is it your impression, today, that in rural America or in rural Canada you have the same level of health care as you do in urban America or urban Canada? If not, what's the difference? How do you evaluate it?

Mr. BAUER. I'll be happy to begin.

I do not any more consider myself to be an expert on urban care, so I am a little hesitant to make an absolute comparison between rural quality, as it exists today, and urban quality. It's been 6 or 7 years since I've had anything to do with careful assessment of urban quality. However, as a former medical school professor, I have no difficulty, in my own mind, comparing the quality of rural care today with what I think it could and should be. It falls far short of what I think is possible.

I would put that in several different dimensions. First of all, we have a gross inadequacy of primary care physicians who are practicing modern medicine. In my estimation, some of the best primary care physicians in this country practice in rural America, but we also have plenty at the opposite extreme who I don't think could get away practicing in an urban environment but who can practice alone in rural areas, for various reasons.

Representative HAMILTON. What do you mean by "primary care"?

Mr. BAUER. Primary care is best defined as care where you walk in and out of the office and spend no time in bed. Primary care specialties are the old general practice, family practice, obstetrics, and gynecology, and some people lump in psychiatry, general surgery, and internal medicine.

Representative HAMILTON. Secondary care?

Mr. BAUER. Secondary care is acute care where you actually spend time in a bed under observation.

Representative HAMILTON. And tertiary care is what?

Mr. BAUER. Secondary care plus high tech is a simple way of putting that.

Representative HAMILTON. Emergency care, what's that?

Mr. BAUER. Emergency care is defined in two ways. And I prefer the clinicians' way, the doctors' and nurses' way of thinking of it, which is care to a person whose life is immediately threatened. So emergency care, as I prefer to use the term, is care for someone who, without medical care, in an hour might be dead.

Representative HAMILTON. Do you believe that you have as good emergency care in rural Colorado as a person living in Washington, DC, would have?

Mr. BAUER. Emphatically not.

Representative HAMILTON. How about Canada?

Mr. ADAMS. No. I think, however, in some locations the answer is, yes. There is increased availability to move people to settings for emergency care.

Representative HAMILTON. You have very good transportation facilities in Canada, so if a fellow is injured out in the woods somewhere, he has helicopter service to get him to the hospital?

Mr. ADAMS. Depending on the Province, yes. Not all Provinces have the same standards.

Representative HAMILTON. How about Wisconsin? I'm talking about emergency care.

Mr. SIZE. Obviously, time of intervention is critical in emergency responses. If you're in an area that is less populated, even with helicopters and space ships, there's going to be a lag in response time as compared to urban areas.

Representative HAMILTON. So you would agree with Mr. Bauer; emphatically not?

Mr. SIZE. In the emergency area, I agree that the environment causes some differences. However, I'm hesitant in the whole area of quality because I don't think there's much in the literature to show that there's a consensus that we know what quality is. I agree with him in terms of perception of the quality, and that the smaller primary care facilities in the rural areas offer fewer sources. I think to document that there's a perception of lower quality is critical, but to say that the quality is inherently stronger or better in urban versus rural, I don't think there are data to support it.

Representative HAMILTON. How do you feel about the quality of care in your areas? Are you comfortable with it or are you not comfortable with it, as you are in the emergency services? Are you comfortable with it with respect to primary care?

Mr. SIZE. I think, from where we are today, yes. For where we need to be tomorrow, no. That's why we've put it at a very high priority in our area. But I think it's an issue for urban and rural alike.

Representative HAMILTON. It's what. I'm sorry.

Mr. SIZE. Quality of care is an issue that's relevant for both urban and rural communities, and it's one of the primary issues we'll have to face in the coming decade.

Representative HAMILTON. And you don't have, in your mind, any sense of a difference between the quality of primary care in the rural area and the urban area?

Mr. SIZE. I think, in many areas, primary care is stronger in the rural areas, at least for those people who have access to the system. In fact, I think that's our strong suit; we can provide direct personalized service in a way that's frequently lost in the larger and particularly poorer neighborhoods.

Representative HAMILTON. Mr. Bauer, do you agree with that? Is primary care better in the rural area, as Mr. Size says, than it is in the city?

Mr. BAUER. I agree with Mr. Size's assertion that many of the practitioners, the nurses and the physicians, are better in the rural areas because they can provide personalized service. However, for them to do their job well, they need access to modern diagnostic technology, namely, x ray and laboratory equipment, which is not equal in rural areas and urban areas.

Indeed, as we travel around the country—and I definitely do have a national perspective on this—we've come, in my company, to the conclusion that the typical rural facility—by no means, all,

but sort of that average facility that we see on a typical consulting engagement—is one, two, or maybe even three generations behind in terms of its diagnostic technologies. So we're in the bind of having physicians and nurses who are excellent and do provide higher quality personal care but, because they do not have access to the modern technology, the patient still ultimately has to leave and go to the city. I do not consider the need to go to a city for primary care to be high quality, so we really need to beef up the support.

Representative HAMILTON. Mr. Size.

Mr. SIZE. Also speaking with some national perspective, I think we have to recognize that we don't want to fail in the trap of over-generalizing rural reality. There are clearly areas that do well and have even specialized laboratory-type resources readily available. There are others that very much lack basic resources.

We have established a mobile CT service, and a mobile MRI source for our hospitals. I won't take time to explain what they are for people who don't know what they are, because it's not important for this discussion. It's just high tech, fancy stuff, and that's the reality that is there in many, many rural areas.

Mr. ADAMS. We're talking about mobile CT scans and mobile MRI to rural populations, and linking all of that with the whole question of quality. My colleagues are right in saying that there's no consensus in the literature on what really quality is. If you look at morbidity studies, some of them will indicate that rural populations, overall, have more morbidity than urban populations in some cases; maybe not interurban but general urban populations. But those things are linked to a whole range of other things, not just the provision of health care and health care services. I think we all recognize and we all realize that.

Representative HAMILTON. Are you suggesting, all of you, that we don't really have any agreed-upon minimal acceptable standards of health care quality? You fellows are so loose with this quality idea that I'm wondering whether you are saying we don't know what quality medicine is. I guess that may be true in a technical sense but, by golly, people have a sense whether they're getting good medical care in their community, or not. And that's a very strong perception people have with respect to their communities.

Mr. BAUER. I disagree with the assertion that we don't know what quality is. This may be an arrogant statement, but I think I do know what it is, and I know many clinicians who are increasingly referring to quality as doing the right thing the right way. If instead of using the word "quality," we talk about safe and appropriate care, we can then begin to make some everyday judgments.

I want to immediately admit that I agree with Tim Size that there are many rural areas that don't have problems and are doing it right, but I think there are at least an equal number where I can find clinicians and hospitals that are not necessarily doing the right thing, or they may be providing the procedures correctly but it's not the correct procedure for the patient. And I know I'm known as a bit of an antagonist on this issue nationwide, but I've been challenging organized medicine, including the medical school that I came from, for many years to go out and evaluate whether the right things were being done for the patient. Did the patient's true

diagnosis match what care was provided to him, and then, was the care done appropriately. Was the surgeon using the modern procedure? Was the laboratory test the correct one?

I believe, given that very specific set of criteria, we will find a lot of deficiencies in many, but not all, rural areas.

Mr. SIZE. It's a good question, and the confusion in procedures is appropriate. I think maybe the difference between the way Jeff Bauer and I would answer this is, I think quality, in terms of a checklist of procedures—do we have a fire extinguisher on the wall; did the person use a protocol that some committee deemed to be appropriate—well, that's all good stuff, yes. So we can make judgments, if people follow the procedure. We can then make a leap of faith and say that that is quality.

But I think what's happening and is exciting—and I think we're hedging our bets because we're all aware of these developments—is quality is beginning to be defined not in terms of, did you have the right tools, did you use the right tools, but what good did you do, what was your outcome, are your patients getting better, or are they not better once you control for their socioeconomic and other issues? That's where, as a people and as an industry, we're moving. And we're not there yet. We have a foot on the boat and a foot on the dock.

So in terms of quality, yes, we can tell you procedurally and I think, probably, in general, you can make all sorts of database statements about procedures and quality. But the more important issue now is becoming, are you really doing well with the resources you have. We don't know.

I think this discussion is very relevant to some of the comments that were made earlier about the greater number of tests that we all know happen in urban communities, the greater number of surgeons, et cetera. Just because urban hospitals and urban doctors use more resources, cut up people more, use more tests, is not, in itself, evident that that's better medicine or a better outcome. I think there's a certain amount of research that shows that the difference in the Medicare cost data we've all looked at has more to do with propensity of physicians in urban communities to do more things, as opposed to necessarily treating people better.

Representative HAMILTON. Mr. Adams, are you familiar with rural health care in the United States at all?

Mr. ADAMS. Only from the literature, sir.

Representative HAMILTON. What's your impression, from the literature, in comparing rural health care in Canada with rural health care in the United States? It's a sweeping kind of question, but do you have any impressions about that?

Mr. ADAMS. I don't think, in terms of the initiatives that are in place in the programs, that they're really much different, sir. The major difference, perhaps, is what the sense of our rural residents is that as long as the service is available, they know they can have access to that service. I think that would be the difference.

Representative HAMILTON. Regardless of cost?

Mr. ADAMS. Regardless of cost, yes. We can't pretend that there aren't problems with our rural health care, because we're putting an awful lot of money into trying to encourage physicians to move to particular areas and change the kinds of models that we have in

place. And we feel there are problems, too, in the kind of training that physicians have to practice in rural areas. We feel, and again, the question of quality, if we don't feel that there was something wrong with the level and appropriateness of the care that people were receiving, we wouldn't be worried about changing the way we educate the providers. So we are concerned.

Representative HAMILTON. Fine. I want to come back to some of these things, but I've taken enough time.

Representative UPTON. Thank you, Mr. Chairman.

I welcome the opportunity to participate in these hearings.

I have a number of questions. I'll try to limit it to 10 minutes or so.

First of all, Mr. Adams, you talked a little bit about the criteria that you used for reimbursing physicians in rural versus urban areas. You try to offer an incentive to allow practitioners a little more money in rural areas, probably to increase service funds over Ottawa and other major metropolitan areas in Canada.

We have something along those lines in this country with practitioners to practice back in rural areas. My district, I think, is fairly typical for something of a normal midwestern district. It's eight counties. About half of it is urban and half of it is rural. We have 15 hospitals, again, about half urban, half rural, and a total of about 520,000 people. We've had some problems with the Public Health Service getting them to come to some of the rural areas in our State; it's the southwestern corner of Michigan.

And I'd be interested as to how it has worked in Wisconsin, Mr. Size, and also in Colorado, Mr. Bauer.

And particularly, since it does work—is that right—in Canada?

Mr. ADAMS. It has worked in the Province of Quebec. It's not a program that the medical profession is in favor of. And it may be not a program that a number of other interest groups were in favor of. It was a program that the negotiations between the Provincial Government in Quebec and the medical profession arrived at. It's one that, it seems has worked for general practice.

The program hasn't been fully evaluated, yet. And one of the questions that we must ask ourselves is that, perhaps, partially, with the increase in the number of general practitioners in the Province of Quebec, we would have seen a bit of movement to the rural areas without the incentives. We are also asking ourselves, why rural differential reimbursement hasn't worked with the specialists in the Province of Quebec. The answer is perhaps that 70 percent with all the urban amenities that go with 70 percent is sufficient for specialists. So there are a lot of questions still to be asked.

As an overall program, fee differentials—differentials exist in other Provinces but work in different ways—it has partially worked in that limited situation, yes.

Representative UPTON. How has it worked in Wisconsin?

Mr. SIZE. The first rule of medicine is, do no harm. And I really believe that should be the first rule of government. And I think, on the physician recruitment side, what we're coming up against is the humongous fee and revenue differential. Your reconciliation package begins to address that, although, I guess, like everybody

else, I don't have any sense of just how significant the numbers will be once we work them through.

We have residents coming out of school, you know, young people, 24 or 25, with educational loans typically in Wisconsin of \$50,000, \$70,000, \$80,000. We're recruiting them, other people are recruiting them. And the difference whether you're in an urban or rural field makes a big difference in how quickly you get out from underneath that debt. So I think it's like anything else, unfortunately, in terms of professional and other types of activities; people follow the money. And it's a real fundamental issue. We're struggling with it in Wisconsin. And I think legislation will be passed in the next session of our legislature, our loan forgiveness programs which basically begin to reduce the cost to young physicians who come out into rural areas. Right now, we're asking them to be very altruistic in ways we're not asking people who settle in urban areas.

Representative UPTON. So your comment is to do more. That the program has not been utilized the way it should be?

Mr. SIZE. The specific Federal program is almost irrelevant. We have maybe over 100 vacancies and there are a good number of counties in Wisconsin that have health manpower shortages. Also, begging the issue of how few people are in the current pipeline, the reality is we have vacancies in so-called health manpower shortage areas and we have as many or more outside of those areas. So a Federal solution like the National Health Service Corps is very needed, particularly in the more frontier areas. I think, for most of rural America, we have to come to grips with the reality, if you pay a physician 25, 30 percent more to practice in an urban county versus a rural county, you don't have to be a nuclear physicist to know where physicians are going to end up.

Mr. BAUER. I certainly share your frustration, Congressman Upton, with the Federal programs to get doctors into rural areas. I can say that in Colorado and in other States where I've worked, the program is not working.

I think Tim Size identified one of the main reasons. The demand for doctors from the National Health Service Corps greatly exceeds the supply of them; there has never been enough. So, at any given time, there are obviously more people seeking doctors and saying that the program failed because they didn't get the doctors they sought.

I want to make it clear, however, that I do not therefore advocate an increase in the National Health Service Corps because, personally, I have not seen it solve very many problems. I've generally found National Health Service Corps doctors to be very fine doctors, so quality is not an issue here. Rather, the issue is the competing urban wage scale and the fact that we do not prepare those doctors for the realities of rural practice and don't make that practice humane for them.

So, in fact, I would be opposed to increases in the National Health Service Corps on the presumption that that would solve the problem. Rather, I think we need to make it very easy for rural doctors to get a competitive wage. I also think we need to provide them with viable and humane practice environments. The Corps' practice of bringing in single doctors to be in solo practice is often incompatible with the existing old-time G.P. that's in the communi-

ty. It would drive any competent clinician back to the city within 2 or 3 years. This is supported by our surveys.

As I mentioned, we've talked to well over 10,000 rural residents, and we've generally found that people in rural communities are very distrustful of the Corps doctors, not because they're bad, they're generally much better; in fact, they generally outshine the communities' older, established doctors; but because everybody knows they won't stay. Pure and simple, people like to have an established, long-term relationship with a doctor. You don't want to start your family and give your whole medical history to a clinician, knowing that in 3 years they're out of there. So people just don't accept the docotors.

We need long-term solutions, and I think everyone has said some of the reasons that it's not a long-term solution.

Representative UPTON. I'm a member of the Rural Health Care Coalition which is a bipartisan group here. We've identified a major problem. My district is in the shape of an L, half of it's urban, half of it's rural. We have, in essence, the same power companies, the same utility costs, and are in relatively close proximity to many of those major centers, within an hour or so. And we have seen a major, major problem with regard to the reimbursement rates between rural and urban hospitals.

My first year here in office, I had a chance to speak to Mr. Bowen about it, then the Secretary of HHS. We didn't get a very good answer in terms of why there was such a disparity between the two rates. And I know in your testimony, Mr. Size, and at the end, you say that you're against discrimination. And, in fact, clearly, that's what I've seen between the two rates. In 1988, we were actually able to pass as attached to a piece of legislation, changing the designation of 53 hospitals nationwide, 5 of which were in my district, from rural to urban.

In a recent visit to one of these hospitals that had changed, the amount that they received for performing the same services was \$600,000 more. This is a hospital probably in the neighborhood of 30 to 50 beds. It's one of only two hospitals in the county. The population of the town is about 6,000 or 7,000. There are a number of towns nearby that are probably fairly similar to the towns of Brush and Hillrose.

Have you looked at your model, at the real discrimination between these reimbursement rates? Because that's a lot of money, and it's also the largest employer in the country. If they are able to keep the urban reimbursement rate, I think they'll survive, but if it's whittled back, there will be some real concerns about it folding in the next year or two.

Mr. BAUER. The real expert on rural-urban differential is Tim Size. So I can yield to him, in just a second, because I'm totally supportive of his approach to trying to eliminate that differential.

However, I don't want to lose sight of the fact that I also think we have far too many rural secondary acute care hospitals. I am disturbed that we spend so much money shoring up underutilized hospitals. I very strongly would rather take the money that's going into keeping unnecessary secondary care capacity and put that into primary care and emergency service.



But, as far as the differential, I think it's unjustified. And here's the national expert on that issue.

Mr. SIZE. Now, he's making me feel guilty for all of my earlier cheap shots.

Mr. BAUER. That's all right. We're friends.

Mr. SIZE. Basically, I think it is class discrimination based on geography. Unfortunately, that's not against the Constitution, so we're—the National Rural Health Association—in Federal district court challenging it on some other bases. We're very heartened by and aware of the increased update that was in the recent budget bill, and that certainly is going to help.

I am still discouraged because when most people talk about the hospital differential, they're only referring to the first few lines of a pretty complex formula. Today, there's still around a 12 percent difference in the base rates which will go down maybe to 8 percent once January 1 rolls around. We need to recognize, though, that nationally, the differentials in terms of what hospitals actually get paid, not at the beginning of the formula but at the end of the formula, for the same DRG is still going to remain in the area of around 30 percent.

Representative UPTON. A 30-percent difference between urban and rural?

Mr. SIZE. Right. That's because of what's called the area wage index adjustment.

Representative UPTON. That's what's coming back through the back door.

Mr. SIZE. People don't talk about that because they don't want to talk about so much at one time. That's what we need to begin spending a lot more energy on. My office in Sauk City, in Sauk County, is across the river from Dane County, an urban county. There's a rural hospital down the street; if that hospital were just on the other side of the river, they would be picking up that wage index and urban reimbursement. Obviously, that distance is trivial when we have to compete with Madison for medical and other personnel, so it's a critical issue.

There's another point I'd like to pick up. That is, we need to rethink our basic concepts of volume and cost. I think the conventional wisdom is that, well, if rural communities want to support "low volume" facilities they should pay for it. I don't think there's anyone that can really say what "low" is, we can say one hospital's volume is lower than another's. When we're saying it's too low, then we need to get into the quality discussion of outcomes. But if local residents are supposed to pick up the low volume, and the current system kind of forces them to do that, and forces those subsidies, then I think we have to think in terms of, why is it that in terms of our urban communities, the high cost of input is in fact picked up by the Federal Government. Essentially, we're taking the two traditional unique characteristics of business working in rural and urban communities; one, you find lower volume in rural; the other is you find higher input costs in urban. And our Federal reimbursement formula is continuing to hold harmless the urban providers, but penalizing the rural. To me, there's a fundamental need to reframe the issue and the way we understand it. If we're going to in fact subsidize the higher input cost in urban areas, we

need to be equitable and do a comparable subsidy of lower volume to some reasonable degree in the rural areas.

Representative UPRON. Let me just ask one question more, and I'll yield my time.

I've been able to participate in a Canadian-United States inter-parliamentary group the last 2 years. We had a pretty good discussion at the last meeting with regard to the Canadian health system. You indicated—and since then, I've done some more studies—Mr. Adams, in your testimony that the primary concern is access to care. But we've heard some real horror stories such as 6- to 8-week backup on things like bypass surgery, which obviously is a fairly critical need when that can be identified. And it really wouldn't work in this country as it has worked in Canada. The costs to the Provinces, I think, were indicated to be about a third of the Provincial budget, and there aren't as many doctors or facilities per capita as there are in this country.

How do you answer criticisms like that? I know the Canadians are quite proud of their system.

Mr. ADAMS. I don't take those as criticisms; I take those as observations. They're observations that other people make of our health care system.

We have waiting lists within our health care system, and we're attempting to address those particular problems. Overall, though, across the system our views in the aggregate measure, not measures of quality, but measures of morbidity, life expectancy, our figures are as good as if not better than other countries in certain areas.

So questions of access, whether or not you need one physician for every 542 people or you need one physician for every 320 people, is a question of—I think, in my mind—a question of convenience in some cases or a question of necessity. We've found that we're about one physician in 542 people in our country right now, and we feel that there may be an over supply of physicians in some areas. One to 542, we believe, are providing pretty good health care. We're concerned about how those physicians are distributed. We're concerned that we don't have some of the specialists in the rural areas that we would like to have.

If I may go on just a little bit. Mr. Size talked about traveling CAT scans. We don't have those traveling MRI's across the whole country. Our question of access and what we're willing to accept is a level of care that keeps us, I guess, basically healthy. We don't have to worry about paying for it directly, and the psychological and economic costs related to that.

So I'm not suggesting that our system in any way should be transported to your system; not at all. I'm suggesting that the system of care that we have we're quite satisfied with what it does basically, but not content, because we continually work to try and improve those questions of access.

Representative UPTON. Thank you, Mr. Chairman.

Representative HAMILTON. Congressman Obey.

Representative OBEY. Thank you, Mr. Chairman.

Mr. Adams, you mentioned, in passing, some studies which related to morbidity rates in rural areas.

Let me ask all of you, do we have any significant evidence that there is in fact a higher fatality rate in rural areas than there is where you don't have medical facilities within 50 miles, say, or within 30 miles? Do we have hard data on that?

Mr. BAUER. We have a fair amount of data showing that death rates are comparatively high in rural America, but I've never seen those data related to a number of miles from a facility. And many of them tend to be occupationally related because so much of rural America is into either mining or farming, which are the two most dangerous professions in the United States. So I think there are serious problems.

To be a little bit of an iconoclast on this, I'm fearful that we spend so much time worrying about trying to prevent few deaths which may be difficult to prevent anyhow. Because, for example, I'm a farmer in my other life. I wear a seat belt and have a roll bar on my tractor, in full compliance with Federal law. My neighbors laugh at me. Until we get everyone to quit laughing at me and put on the seat belt and the roll bar, I'm not sure that we need to have a neurosurgeon in every small hamlet.

On the other hand, I'm very concerned that we need to make sure that people's day-to-day access to the system is perfectly consistent. What my friend to the north has said is something we need to pay serious attention to.

Representative OBEY. But you're saying that, to your knowledge, there are no definitive studies which demonstrate that, because of a lack of health facilities, there is a higher fatality rate in rural communities?

Mr. BAUER. I've never seen such a study.

Representative OBEY. How about you, Mr. Size?

Mr. SIZE. I'd agree. I think my concerns about rural health care are not based on a sense that more people are dying because there aren't enough hospitals or doctors.

Mr. ADAMS. I agree with that.

Representative OBEY. Let me ask you, are emergency rooms in rural hospitals being utilized, as they often are in urban areas, by persons who don't have access to health insurance, or do you see different patterns there?

Mr. SIZE. I think the pattern is similar. When I look at Wisconsin, basically, when you look at the inner city and you look at rural, that's where you're going to see the larger bad debt, that's where you're you going to see the larger so-called charity or community care. It's a substantial piece of every rural hospital's budget. Some of that's inpatient; a lot of it's in the emergency room, as well.

Mr. BAUER. I totally agree. In fact, I can give you a little anecdotal evidence, but it's perfectly accurate. A couple of us from my company recently spent a few days in a small hospital in the southern United States and had access to all of its emergency room records for the last couple of years. We looked at hard data and found there was a serious problem with medically indigent being the overutilizers of the service. We also found evidence that the contract emergency room company, which happened to be based out of the big city 60 miles down the road, seemed to be referring out all of the people with good insurance to the big city hospital for

a check up. But we found very little evidence of referrals from those who didn't have insurance.

I completely concur with Mr. Size that we regularly see serious problems with the indigent being overutilizers of the emergency rooms in rural hospitals; there's no question about it.

Representative OBEY. Let me go back to the question of the National Health Service Corps.

My understanding is that, right now, there are approximately 200 to 220 doctors in the system. There are about 2,500 communities bidding for the services of those doctors. And you've had a substantial reduction in the number of doctors in the system.

You've already commented, both of you, to some extent, on your disagreements about the utility of that program.

You've indicated, Mr. Bauer, that you would not support an expansion of that program because you would prefer that we find other ways to assure that physicians in rural areas are adequately compensated. I would, too, but I don't think that's likely to happen any time in the next 5 or 6 years, despite the progress that's been made on the relative value system which has just been adopted.

So, I guess I would ask, what do you think the main problem is, both of you, what do you think the main problem is with the Health Service Corps? How would you change, if we were to try to make that program work better, how would you change it?

Mr. BAUER. I would begin with making sure all of the practice sites had a minimum of three primary care providers. I think that one of the biggest problems, in or outside of government service, for a physician going into rural America is the need for support in terms of weekend and week night calls, someone else to confer with on diagnoses, someone else that can keep up on the half of the clinical literature that you can't. In other words, all of our studies have shown that to keep any doctor viable in rural America, you have to provide that clinician with people who practice medicine like he or she does. Unfortunately, due to the small scale of many of the National Health Service Corps sites, you end up with a lot of doctors who go out and end up being the sole doctor in the community. And, very typically, they are just a totally different generation from the one or two older doctors that may already be there. So, to make the National Health Service Corps work, I would use the same solution for making any primary care practice work; make sure that you have a minimum of three practitioners to always have someone to share calls, to discuss diagnoses with.

Representative OBEY. How would you get doctors into the program?

My understanding is that the Corps is having a devil of a time even finding doctors who want to participate even if, by doing so, they can relieve a substantial loan overhang.

Mr. BAUER. Ask an obvious question and you get an obvious answer; money. I also think that if we expand the National Health Service Corps, we need to look at existing experienced clinicians. One of the reasons I'm opposed to the Corps is that I think the problem is so urgent that we do not have the time to restructure the Corps. If we went in the traditional mode and reestablished the Corps and gave millions of dollars, it would be 7 or 8 years before we'd see an increase above that 300 or fewer doctors in the pipe-

line. We don't have 7 or 8 years. These are primary care resources we need right now.

I think the key would be for the National Health Service Corps to go out there and compete with the HMO's and the managed care programs for established practitioners. I know many urban-based internists and family practitioners who, for an extra \$30,000 kicker, would be happy to get out of urban medicine. So I think if we would simply do what Mr. Size has already suggested and have decent incomes and go for people who are already in practice who meet specific quality criteria, that the Corps could do a service by suddenly bringing a lot of doctors into three-plus practitioner sites. The key is going to be money, but let's not waste time doing it through the educational system. Let's go out and buy off some of the existing urban surplus of primary care practitioners.

Mr. SIZE. I think I agree on all points. I'm a little hesitant, perhaps, on the last one, but I think it's a viable alternative.

In addition, I would consider cost sharing with State governments that are willing to implement loan forgiveness programs so that rural communities can immediately go out and compete in the same way with the HMO's and the urban clinics, so if they work there for 1 year, they get 20 percent; 2 years, 40 percent forgiveness, et cetera.

Representative OBEY. Let me ask you about loan forgiveness, because we've tried to make the National Health Service Corps available to nurses, as well as doctors. One of the reasons, we're told, that hasn't worked is because the nurses are not interested in loan forgiveness; they're looking for scholarships.

Why would you not run into the same problem with doctors?

Mr. SIZE. First of all, I think the dollars are very different in terms of the amount needed to get a degree for a nurse or to get a degree as a physician and then the income available to pay back for education. With loans you are dealing with a graduate; with scholarships you're dealing with young people at the beginning of the educational pipeline. The reason we're stressing loan forgiveness is that's something that will have an immediate impact on recruitment. You know, this spring, we can be out there right now looking for warm bodies rather than waiting for 4 or 6 years.

Representative OBEY. Let me ask you, then, how much effect do you think that you're going to have on the ability of rural communities to obtain and retain the services of physicians, given the new relative value scale which, in rural Wisconsin, at least in northwestern Wisconsin, is going to result in an increase in the payments of Medicare and primary care specialists, family practitioners of about 30 percent or more, while the specialists' reimbursement will be dropping significantly?

Mr. SIZE. I think probably of all the stuff that was in that reconciliation package, that's the one that excites me the most. It seems very much a step in the right direction but I've not seen numbers in analyses in terms of a timetable in terms of specifics. Also, we don't know to what degree the private insurance market will alter their reimbursements, which currently has many of the same biases. I also understand that there is still maintained, at least for loans, a geographic differential.

Obviously, it's a step in the right direction. Is it the final solution? I'd be very surprised if it is.

Representative OBEY. I must say, I've been surprised by two things as far as that change is concerned. One is that it has received almost no press coverage, and I think it's probably the major unwritten story of the last Congress.

Second, I was very surprised by the reaction of the physicians in my district. I visited with medical communities in 9 or 10 different counties in my district in the last 5 or 6 months. And I expected to hear the specialists saying, we don't like it because it's going to knock us in our pocket. And I expected to see the primary care doctors just say, great stuff, it's going to increase my income.

In fact, well over half the specialists whom I talked to, even though they were going to be receiving significant reductions, felt it was needed given the nature of the practice of medicine in their areas, which I found most surprising, and encouraging. I don't know if the pattern will hold everywhere, but it was interesting to me.

What about additional major cuts in Medicare in the Federal budget. If that happens, will not those cuts wind up having a very much heavier impact in rural areas than they do in urban areas?

Mr. BAUER. Sure. I'm not familiar with the specifics of the cuts. However, if they should get around to affecting home health, they would have a very damaging impact on rural America. And I think that many, many Medicare patients in small rural hospitals are there simply because the home health is inadequate. I've gotten this from many clinicians, or the clinicians simply don't know how to use home health. So, although I'm not able to address the specifics, I think it's a very much on point question.

I'm disturbed if, in any way, those cuts are going to diminish home health because that is one way to keep people in a less expensive setting.

Mr. SIZE. I think you probably can guess how I'd respond because of my earlier testimony. The inner-city hospital is driven by Medicaid policy and the rural hospital is very much driven by Medicare policy. Both have a small private pay base, so any cut at the Federal level is magnified in terms of its impact on that private fee, which is kind of a fudge factor in our system, the so-called cost share. Rural hospitals are uniquely sensitive to any cuts in the Medicare program.

I guess it would probably be doubly a problem because right now there's going to be a modest amount of positive response to the changes that are in this reconciliation. If you come and hit us with a sledgehammer in 6 months, we're probably talking about even deeper depression.

Representative OBEY. That's exactly what I'm afraid of. I'm afraid that what little progress we've finally started to make with the relative value change and the change in labor related differential, I'm afraid that could likely be wiped out by those additional cuts in Medicare.

Mr. SIZE. I would like to add something which I don't think has received very good attention, too. It's a benefit to represent a subset of the industry; I don't have to represent the whole industry. We don't pay enough attention to, I think, one of the graphs I

put in my prepared statement of what rural hospitals have been living through in the last 4, 5, or 6 years with respect to the payment system. In year 1, there were some modest kinds of operating margins. Those very quickly went into negative numbers so that, I guess, with the first 3 years you had accumulations of positive operating margins in the urban sector, nationally, of over 40 percent while you had accumulated margins of around 10 percent on the rural side. Given differences in accounting, I think most people would say that the rurals just about broke even and the urbans probably had a 25, 30 percent positive operating margin.

What that translates into is, our fat is gone on the rural side whereas urbans in fact had more money, they've been able to spend more money, and their budgets are presumably more inflated by that factor. So when we start talking about cuts, I think we have to remember where some of the surplus operating margins occurred in the initial more experimental years of Medicare.

Mr. BAUER. I certainly share your concern. And I think it's all the more important because the rural hospitals serve a high concentration of Medicare patients.

But I'd like to get back to the reason that I'm so concerned, and see a sense of urgency here, as explained in my prepared statement. A large number of dollars from rural America is driving down the interstates to the urban providers. I tell all our clients that we should not look to Medicare and Medicaid changes for the future of that facility. And if a hospital in the rural area wants to try and survive and turn things around and indeed become better, we have no rabbit we can pull out of the hat and do that, without private patients.

So I simply share your concern because that is the future of health care in rural America. If it's going to be viable at all, it's going to depend, in the short run, on our ability to bring back people with real resources, private insurance and money. Right now, we're losing those people. If we don't get them back quickly, I'm as pessimistic as you are.

Mr. SIZE. I give the same advice when I'm talking to the local community. But I guess when I'm here in Washington talking with representatives of the Federal Government, I spend most of my time, both writing and verbally, talking about Medicare. We simply have to recognize that that is the major source of payment for rural America. And, while it's nice to talk about creative off-budget responses, we constantly need to come back to at least a significant piece of the reality is Medicare.

I think the co-op has been one of the national leaders in trying to raise people's consciousness about the Medicare problem while, at the same time, I think we're also providing national leadership in doing things to get our own houses in order. I don't find those concepts mutually exclusive.

I sometimes, perhaps, get too suspicious when people talk about the need for change that's not Medicare as if somehow then the need to change Medicare can be put off.

Representative OBEY. Two last questions. First of all, the Rural Health Care Transition Grant Program, how effective do you think it is; and how would you reshape it?

Mr. SIZE. Well, you have to remember what we've been talking about. The money has just begun to flow. I'm not sure if the checks have been cut, or not. So we don't know the answer to that.

I think it's money well focused. I know there is some concern of creating a consultant's—

Mr. BAUER [continuing]. Full employment act.  
Representative OBEY. Amen.

Mr. SIZE. So perhaps it would be judicious to look at that, but we don't want to throw the baby out with the bath water. We need expertise, we need consultants. I just want to be sure that the program doesn't work in a way such that the fundamental work isn't by that community and by that hospital staff and that they're using consultants judiciously. I also would not want to see consultants barred from being paid with those funds.

Mr. BAUER. I've made the decision—

I'm sorry, were you done?

Mr. SIZE. I thought you were a consultant.

Mr. BAUER. I made the decision not to take consulting work under the rural transition program to avoid conflicts of interest since my firm is involved in the evaluations. So I can speak, I think, somewhat objectively there. And I share the concern that there will be a lot of misspent money on consultants who don't know what they're doing because there are very few rural health care consultants who understand the realities of rural hospitals. I'm afraid we're going to get a large number of urban based systems imposed on small hospitals.

But in terms of your specific question, will it make a difference and how can we improve it, I do not believe that the transition program is going to do what we expect of it. I, like many people in this room, was actively involved in the efforts to bring the thing to be, and I think at the time the legislation was being discussed at the bill stage, there was a feeling this would bring about some of the transitions I've talked about from secondary care to primary care.

I think that is not going to be the case. Almost all of the money is going for very short-term solutions that have little to do with the transition. One of the real problems is that \$50,000, the maximum amount, is a drop in the bucket, and transition is going to cost a whole lot more than \$50,000.

I'm really pleased, though, with the language in the reconciliation bill that authorizes \$200,000 rates. I think at the \$200,000 level, we're beginning to look at the possibility of serious transition. We have one hospital, St. John, Kansas, that is doing exactly that. And I have its plan in my brief case. I'd be happy to give you the complete plan if you'd be interested.

The very specific dollars and cents budget for taking a typical small, failing, rural secondary acute care facility and turning it into a primary care facility, the actual investment costs in this I think very typical case are around \$900,000. The citizens of St. John recently raised \$330,00 of their own money to support this. They're going to need the clout, now, to make up the difference between \$330,000 and roughly \$900,000, and a \$200,000 grant under the transition program would make an enormous difference there.

So, how to get what we thought we were really getting I think is more along the lines of actually appropriating what was authorized



under the reconciliation package, giving enough dollars to a smaller number of hospitals so that we have viable models, like St. John, and then I think that'll assist us.

Mr. SIZE. I would agree with part of that. I don't think, however, that it's the role of the Federal Government to be the only source of innovative capital. I guess if I were to stretch the dollars, I'd want to look at those applications that are dealing with fundamental change, but also look at those that bring in their State, county, or community to cost share in that expense.

I think the other thing, and I'll admit to be perhaps self-serving, is that I think there's a problem that network cooperatives cannot apply in their own right. So, basically, if I want to come in for a Federal transition grant, I have to get some of our hospitals to forgo going in as an individual, and to come into capture funds that could be used for, in our case, all 20 hospitals. I think that's probably a technical adjustment that could be well considered.

Representative OBEY. Mr. Adams, my understanding is that the Canadian National Government is not very much involved with questions of physician recruitment; it's largely left to the Provinces. Is that true?

And second, if it is, how then do you really manage the problem of getting people into these rural areas, and what kind of problems do you have with competition?

Mr. ADAMS. I think that's true. The Federal Government is only involved inasmuch as what they do with immigration legislation. We've had trouble getting Canadian graduates to go to many of our rural areas and so, over the years, there have been a number of foreign medical graduates that have been recruited to work in rural areas. The Federal Government then works with the Provincial government to look at the numbers that are needed for what's called selected areas of practice. And those immigration slots are made available, and those physicians are recruited from abroad. That's really the role the Federal Government has in looking at moving physicians to certain areas.

The Provincial governments have a whole range of different programs; tax programs that provide tax grants, tax deferment; special loans for setting up practices in certain areas; and the differentials that we talked about in one particular Province. Physicians are free to move from one Province to another, and there is competition between Provinces for physicians. I think that we find that physicians tend to move to the larger Provinces, the Province of Ontario, and elder physicians tend to move to British Columbia because the weather is so much nicer. So there have been problems with that.

Governments have attempted to try to put in place barriers, especially in British Columbia, barriers to having physicians move into that Province and, at the same time, say that those who move in will have to go into practice in particular areas of the Province. That was taken to court and the Province lost. And I think that's something that I think was the right thing to do.

I think overall, now, the programs are really quite varied. Whether or not they've been successful, many of them, in moving people to particular regions for certain levels of time, I think Mr. Bauer talked about people wanting their physician to stay more

than 3 years. I don't know whether or not we can expect physicians to settle in a region or whether or not that really is a criterion for good health care, if we leave the word "quality" out of good health care, to have someone settle for 3 years.

I find one of the things that we're looking at very much now is to try and get physicians at least in to set up practice for a while and get locals to go in and help that physician over a period of time.

I think looking at having more than one physician in an area, I think, is for us a key. And I think that's a group practice by one, two, or three, and I think this is also key. We've talked about money and the supplemental tax grants and tax deferments to move physicians to certain areas. But I still think it's our belief and what we've found is that, really, it's not just the money; it's all those other things around it that make the real difference. Otherwise, those physicians that are making 70 percent, those specialists, with 70 percent, you'd expect them to move to places that are in the rural areas of Quebec. But it's the access to high tech within the urban communities, access to their colleagues for diagnosis-consultation type of things, and access to the amenities of life that the urban areas bring. And we find more and more, with two-career families, that the aspirations of the spouse are especially important.

Representative OBEY. Thank you, Mr. Chairman.

Representative HAMILTON. How do you get doctors to go way up there in the far stretches of Canada? You have very small villages up there, no technology. Who pays for those doctors?

Mr. ADAMS. Those doctors are paid under the Provincial Health Care Plan. They bill the Provincial Health Care Plan at the same rates as the urban doctors do for the most part. What you will have, though, is specific grants or settlement grants and payment, in some cases, for those physicians to take trips, for continuing medical education programs, back to an urban area.

Representative HAMILTON. Does a doctor live in one community and fly all around to a lot of different communities?

Mr. ADAMS. Are you talking about the very remote areas?

Representative HAMILTON. Way remote, like Indiana. [Laughter.]

Mr. ADAMS. The very remote areas have mostly nursing stations.

Representative HAMILTON. The doctor visits occasionally? And who pays the doctor? He can't possibly be there, he's not going to see very many patients; he'd spend half his time flying around.

Mr. ADAMS. That doctor is paid under a specific Provincial program.

Representative HAMILTON. Is he salaried?

Mr. ADAMS. Salaried or seasonal for that particular visit. The rest of the doctor's work would be on fee for service.

Representative HAMILTON. He'd be a government employee?

Mr. ADAMS. No, he would contract for those services to the Government. He's still an independent contractor.

Representative HAMILTON. You said, earlier, that you couldn't think of any rural hospitals that had been closed in Canada.

Mr. ADAMS. That's right.

Representative HAMILTON. How come you don't close them, and we're closing them all over the place? We have closed 200 and we have 500 more we're going to close. What's the difference here?

Mr. ADAMS. I think maybe we should be closing them. I don't want to say that at home too loud. I think rural hospitals, as here as well, they're a pride of the local community. And the health care system in Canada, as I said, is very politicized. The local politician is very aware that, if that rural hospital closes, he may not be elected the next term.

Representative HAMILTON. From an economic standpoint and from a health care standpoint, it's really not necessary for those hospitals to stay open, is that what you're saying?

Mr. ADAMS. I'm saying that that's in question. And what's being looked at, now, is a regionalization of services. And we recognize that, to be able to regionalize services, you have to assure the community that they're going to have access to good health care services and, therefore, the closing of a particular hospital won't pose a problem to them. So there must be work with the local community which has to be part of any planning arrangement, any decision to convert or close, that institution.

Representative HAMILTON. Are we going to see a lot more rural hospitals close, Mr. Size?

Mr. SIZE. I think we clearly are. My concern is that the right ones close. And right now, I think it's more that closure may not have to do with need as much as other random variables. I think we have to be careful when we talk about closure. You can close a hospital by taking down a sign that says, hospital, and putting up a medical center which may not have beds or what have you. I think the real issue is how services are changed.

Representative HAMILTON. Are you suggesting that the figures I cited earlier, and I think you all made reference to, are phony?

Mr. SIZE. No. I think with any predictions, it's based on assumptions. If we continue along the road we've been going—

Representative HAMILTON. 200 have closed. Is that misleading to say 200 hospitals have closed because they've just changed the sign, or is it a fact that 200 hospitals have had to close?

Mr. SIZE. It depends on what you mean when you say, closed. Is it an empty lot now or a vacant building? My guess is in some cases, that's true. Probably in many cases, it's not true. Is it the continuation of a traditional inpatient rural hospital. No.

Representative HAMILTON. So those statistics aren't particularly meaningful to you, then?

Mr. SIZE. Not particularly. Although I do cite closures as an issue, I don't think it's the most relevant statistic that we have. I'm much more concerned about hospitals that are "in trouble" and are struggling. I think if you look at rural hospital balance sheets, the great majority of them you're going to see are very ill small businesses.

Representative HAMILTON. You talk about primary care hospitals. I don't know what that is. The way you described primary care to me a minute ago, I got the idea it was a visit to the doctor. What is a primary care hospital and what's the difference between a primary care hospital, today, and an ordinary hospital?

Mr. BAUER. Sure. I'd be delighted to address that.

A primary care hospital will be a facility that will not maintain all the technology and personnel to be able to provide life-saving intervention on short notice. When you go into an acute care or

secondary care hospital today, you are walking into a facility which, either by virtue of some national accreditation or State licensure, is determined to have an emergency room with a defibrillator and a surgical suite and all the things it takes to save a life so that if the patient in a bed suddenly goes into a crisis situation, and by virtue of it being a hospital, it is presumably able to take care of that need. The reality is often different in these small facilities, but that's what it means.

A primary care hospital, by principal designation, will not have any life-saving capability. Although there is no primary care hospital in the United States today that meets the potential, I think that this model in St. John is a good textbook case, and hopefully we'll be converting that very shortly.

Let me tell you what the model is. First of all, the foundation of a primary care hospital is a short-stay observation bed—call it an infirmary or dispensary type bed, to use the military lingo—where you're not certain whether the patient has some self-limiting condition which might get better so he can go home, or he might be in the early stages of something that requires hospitalization because it may be life threatening. An infirmary bed will be the principal foundation of overnight stays in primary care hospitals, with the key distinction that when the patient goes into a critical situation, the patient will be transported in an advanced life support ambulance to the nearest secondary or tertiary care facility that is able to meet his or her needs.

So the key distinction will be no life-saving capability, no emergency room with all the fancy things. And when the patient is in a crisis situation, that patient will be transported to a hospital with life-saving technology. Other characteristics of our primary care hospital model will be hospital-based doctors. Three clinicians will be there so you'll have 24-hour urgent care to take care of the little inconveniences like bee stings, dog bites, and that other routine stuff. But that's urgent care, not life-threatening emergency care, that can be taken care of on a 24-hour basis by simply calling the on-call doctor or nurse practitioner or physician assistant who will come over and take care of the patient's routine needs. So a hospital-based doctor on call at all times can come take care of nonlife threatening things.

Home health, in our estimation, should be a foundation of a primary care hospital so that when the patient can avoid hospitalization, he can be monitored in his home. And further, medical equipment and the like can be delivered to the homebound patient. In many communities, you'll have to have a little pharmacy in the primary care hospital because once the acute care hospital closes, the pharmacist usually closes down. So, we'll have a pharmacy. Long-term care will also be an important part of the primary care hospital because rural communities, because of their population's relatively greater age, need to have a place to take care of the elderly. And it so happens that acute care beds, when they're decommissioned, tend to make pretty good long-term care beds.

Last, but not least, will be the ambulance system. We believe strongly the ambulance system should be part of the primary care hospital. The ambulance should be housed in a barn right there at the hospital. Registered nurses should be qualified as drivers and

technicians so that when a patient in an observation bed enters a critical situation, the ambulance and patient can be out the door in 90 seconds going to the secondary or tertiary care hospital that meets the patient's needs.

So a primary care hospital actually becomes a full-service facility for all primary care, but for anything that requires secondary care, the patient goes 20 or 30 miles down the highway to the affiliated secondary or tertiary facility.

One other concluding comment I'll make is that in every other one of these that we have done, the actual dollar volume of employment generated in the facility goes up. You have so many of these secondary hospitals, the 200 you're talking about that are ready to close, the 500 that are ready to close that are barely earning enough to keep people employed, the primary care hospital would actually employ more people if it brought back the private paying dollars.

Representative HAMILTON. You say that the higher level of services that rural residents want they have to be prepared to subsidize. They have to be prepared to subsidize it, or do they look beyond their community to subsidize it? Does that mean they want the State and Federal to subsidize it?

Mr. BAUER. They want State and Federal subsidy, who doesn't? But it is our position in every community that we've ever worked in that we better plan on doing it on our own. If that means a \$330,000 fund raising campaign, as it did in St. John, or setting up an ambulance district, so be it. Yes, because we're very pragmatic and concerned about the urgency of the situation right now. Our basic approach in any community where we work is, folks, we're going to have to do it on our own.

Although we talk, ideally, about several changes that even Tim Size and I agree on would be desirable from a Federal standpoint, we have to look to local resources to do it right now. And to be perfectly honest with you, I'm not all that pessimistic. I think if we have some seed money, which is very different from on-going program money, I think we'll do fine on our own.

Representative HAMILTON. Neither one of you really look to the Federal Government to solve the problems in rural health care very much, do you?

Mr. SIZE. On the one hand, I have to again pay respect to what was accomplished in reconciliation, and not bad mouth it. On the other hand, we're certainly somewhat pessimistic in terms of the longrun ability of the Federal Government to be helpful. I see a lot more creativity going on at the local level at this point in time.

Representative HAMILTON. How would you describe the corps function of the Federal Government with regard to rural health care?

Mr. SIZE. The first description I would have is, again, to do no harm. And I think the Government is a long way in terms of meeting that criteria. It has begun to with some of the physician changes and some of the hospital changes. But, again, it so drives reality as we feel it in the rural areas, if we just had a level playing field, that would not solve all the problems but it would certainly be a major, major increase over where we are now.

Representative HAMILTON. Well, do no harm, of course, suggests that we don't have any Medicare, we don't have any Medicaid, we don't have any research, we don't have any National Institutes of Health, we just don't do anything.

Mr. SIZE. I said, as a starting point, it assumes that infrastructure, but that it be done and implemented in a way that does no harm. That, in fact, if we have Medicare dollars going out there but they're going out there in ways that are essentially giving premiums to our urban-based competitors, that does us harm.

Representative HAMILTON. What impresses me whenever I have public meetings is how much time I spend talking about health care with constituents and how much they look to the Federal Government for some kind of action on health care.

You walk down the street of a small Indiana town, today, and you ask people whether or not they favor national health insurance. You would be amazed—you may not be, but people would be amazed at the percentage of people who favor it. Now, I don't know if they know what they mean by national health care. What it reflects is, however, I think, a dissatisfaction with the health care delivery system that we have in the country today with respect to quality of care or access, whatever. But there's enormous dissatisfaction with the health care system in the United States, today.

I don't think that's an experience peculiar to me. I've been talking to my colleagues around here, and I just think it's sort of basic. And we're just more and more focused on health care and the Federal Government role seems to me to be expanding and it's going to be expanding. Whether that's good or bad, I'm not sure. But it seems to me, it's going that way.

Mr. BAUER. As far as your question as to what should be the basic corps Federal policy, I certainly concur with what I think is one of Tim Size's main messages. Pay us fairly when you force us to take patients whom you have entitled as Medicare or Medicaid patients; don't give us any less because we're rural. I think that's absolutely critical.

As far as the next stage, do we need Federal programs to save rural hospitals to put the doctors in? I would argue, no. I like Federal incentives and I'd like the roadblocks to be lowered so that rural communities can do pretty much what's in their own interests. I concur that the reconciliation package authorizes some fine demonstration programs. The quicker those are appropriated, the better.

New Federal programs to save rural hospitals? I argue absolutely not, in my prepared statement. Rather, I think we need leadership to rationalize on an economic and medical quality basis the systems so that we're providing a basic level of primary and emergency services which I believe rural communities can essentially pay for on their own. I believe primary care becomes viable in rather small markets, a couple of thousand people; secondary care does not.

Representative HAMILTON. Do you have a feeling about how this resource-based relative value scale will impact rural areas?

Mr. SIZE. It's definitely going to be helpful.

Representative HAMILTON. It's going to be an improvement over the present system?

Mr. SIZE. Absolutely. What's not clear is just how far it's going to go because, really, I haven't seen the computer runs and I don't have the ability to say what it's going to mean in terms of the money a physician receives at the end of the month.

Mr. BAUER. I'm not convinced that it's going to be helpful, nor am I convinced it's going to be harmful. We have to see what the regulations ultimately become. But I testified to the Physician Payment Review Commission and expressed a real concern that, because rural doctors are facing inadequate diagnostic equipment at their laboratories, and x-ray equipment often being outdated, I was very fearful that even though they might get more money, it might not provide them with enough money for the additional overhead that they really need to have good diagnostic backup for high quality primary care in rural areas.

So my answer to your question very much depends ultimately on how the rates reflect the need for a greater capital investment in rural areas.

Representative HAMILTON. Do either one of you see any initiatives that we ought to take here, to improve the allocation of physicians or other health care providers in rural areas?

Mr. SIZE. Yes. I think we've commented on a number, both you all and we all have. And we've talked about financial incentives to get physicians out there. I think we've also talked about the RVS system being a good step. I think we've implied that the whole issue of overhead of capital hasn't yet been factored in. We're talking, as I understand, with the RVS proposal that was passed. It still kind of holds the local community kind of responsible for the lower volume which translates to higher capital costs per visit. I think some of those issues of we might call geographical differential might be seriously considered at the next look at the RVS system.

Mr. BAUER. I'm certainly not in favor of any Federal programs similar to those that we've had in the past. But any leadership or demonstration programs that can be used to take established, experienced doctors in an urban practice right now and bring them out into the rural areas, the sooner, the better.

I would also add, I think we need to be doing the same with nurse practitioners. So often, we talk as if doctors were the solution. It's our firm belief that the nurse practitioner can be just as much a viable part of the rural primary care system. I think we need to look at advanced nursing practice as well.

Representative HAMILTON. The demographics of rural areas, the age keeps going up, doesn't it?

Mr. BAUER. I'm not convinced. That's what the extrapolation of the 1980 census shows us. I've been in many rural communities where I think we're going to be in for a surprise when the 1990 numbers come about.

Representative HAMILTON. If it is true, that would put more burden on rural facilities, I presume? Is that right? Because older people demand more services.

Mr. ADAMS. I think that's what we see. In our setting, we see that the rural communities have larger proportions of elderly population. Whether or not you need more acute care services in a rural setting or ones that are more a cross between primary care

and long-term care. That still has to be looked at, what kind of model we need in rural communities.

Mr. BAUER. Since you're asking some very perceptive questions about demographics of the rural population, I'll add another purely anecdotal point. But I think we may be surprised. Medicare was passed in 1965 and the people that were retiring then are 90-year-olds today. To the extent that they're going to hospitals, they're very expensive patients. But many people who are 65 today in rural America have a lot of money. And I think we're going to discover that a large number of them, although they may feel that they want to get every Federal benefit possible under the Medicare program, are still going to be willing to pay private fee for service rates to get care. We've seen this in St. John. We proceeded with this primary care plan, telling the community in every way possible, and reminding them at every step, we will probably set up a facility that is not federally eligible. This will probably be a total private pay facility, even for people over 65. And the community, which is disproportionately elderly in the country, still contributed \$330,000. So today's retirees have a much bigger storehouse of money that I think would allow them to pay more for their own health care as they are in "retirement." And I think we're going to be in for some surprises, there, too.

Representative HAMILTON. Anything else gentlemen?

We've had a good hearing. You obviously are all very expert in your areas, and have contributed to our understanding of the problem. We appreciate that very much.

Any closing comments?

Mr. Adams.

Mr. ADAMS. Just a brief closing comment.

I think the whole issue of rural health care is a complex one, as evidenced by what we've discussed here today, and there aren't any single programs. I think one of the problems that we've had is that we've attempted to deal with the issue through single programs, without any real coordination of all the different levels of programs; the education programs, the incentive programs, and the hospital sector, the planning programs. We've also treated rural health care as if it were a separate health care system, and that's been wrong. It should be treated as one whole health care system with the integration between the rural system and the urban system.

Representative HAMILTON. That's a good point. I'm sure the others concur with that.

Any other comments?

Mr. SIZE. I would add, just as we talk about integration of rural health with urban health, we need to talk about integration between rural health and the other aspects of the rural community. I think we can be blithe and say, well, you can travel. I know when I'm in a hospital, I want my family to be there every day visiting me. If I'm 2 hours away, they're not going to be able to be there every day.

I think Jeff Bauer implied, in one case, that the economic issue was a wash. I think in many cases, it would not be a wash, and when we talk about centralizing America's health care system, we have to recognize that we're talking about centralizing America's



health care jobs, and the cash-flow, and the economic benefits that go along with those jobs. When we talk about changing America's health care, we have to look and work toward a rational health care system, but we also have to work for rational local community economies.

Mr. BAUER. On the point of whether you can be close to your family or have to drive 2 hours to see grandma in the hospital, I will say as the rural American at the table, that we're just going to have to put up with that. Those of us who live in rural America recognize that we're making some sacrifices and there are some things we can't have. And I, personally, would not propose to use that as a rationale for trying to maintain underutilized, and therefore, inferior quality secondary care. I still believe in local primary care and emergency services that can then transport patients to a secondary care facility as needed. Transportation and communications are cheap in today's economy; they weren't when the program was set up in 1946.

My concluding comment, quite frankly, is to thank all three of you for some very probing questions, which suggest you're willing to look at some of the sacred cows in ways that we haven't in the past. And we need some dramatic new approaches to it, and I think your questions are going to move us that way. So, thank you.

Representative HAMILTON. Thank you very much, gentlemen.

The committee stands adjourned.

[Whereupon, at 11:50 a.m., the committee adjourned, subject to the call of the Chair.]

