

# T E S T I M O N Y

**RAND**

*Ensuring Delivery of  
Necessary Care in the  
United States: Testimony  
Presented to the Senate  
Committee on Health,  
Education, Labor, and  
Pensions*

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## **RAND Health**

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## Summary

Necessary health care is care in which the expected health benefits for the patient exceed expected risks, the benefit is substantial, and the care is so clearly the right thing to do that a physician would consider it unethical not to provide it. This testimony describes how we can shift the distribution of some of the health care delivered in the US from less than necessary to necessary and, in addition, ensure that people are offered care that is necessary.

We need to make this shift because the care currently being delivered is quite variable. Perhaps 20-30% of the care given to patients is unnecessary; in contrast, patients do not receive perhaps as many as 1/3 of the services they should receive. Efforts to shift the distribution by changing financial incentives have generally failed. Methods for measuring the necessity of care, which are more reliable than a physician's clinical judgment, are available, and the evidence suggests that physicians want such guidelines.

We can measure necessity of care in the following way:

- Identify a procedure such as removing a uterus or doing coronary artery bypass surgery
- Develop scenarios that reflect the possible reasons a doctor might choose to do such a procedure.
- Synthesize the scientific evidence that justifies the indications for which the procedure should or should not be performed.
- Combine the analysis of the scientific data with professional judgment to rate the indications. The methodology developed at RAND uses a multi-disciplinary expert panel, nominated by the relevant specialty societies, to fill in the scientific review and to rate the indications.

The process produces a series of scenarios for each procedure. Each scenario is rated on a scale of 1-9 for appropriateness, and then, in turn, each of the appropriate indicators is rated as to whether it is necessary as well as appropriate.\*

Such ratings will improve the clinical process. All of the above materials should be made available to patients, the public, and physicians. The ratings should be used to ensure that all necessary care is provided to all Americans. These assertions are supported by the results of a very substantial body of empirical research.

The next century needs to begin with a serious commitment to re-engineering the medical system to reduce the chaos generated by the current system. The basic steps in this re-engineering process are as follows:

- identify the 60-100 core medical procedures.
- for each procedure, assemble the scientific evidence about the circumstances in which it works and doesn't work.
- develop clinical scenarios encompassing the possible reasons for using each procedure.

- for each procedure, convene a multi-disciplinary panel of experts to rate each of the scenarios as to their necessity and appropriateness.
- make the results of this process broadly available to physicians, patients, the public, and managed care organizations.

Since the resulting necessity and appropriateness criteria will not be perfect, provisions must be made for a doctor and a patient to ask for a quick independent review. Provision should also be made for individuals to purchase insurance plans that would give patients and doctors the right to choose any kind of care they want as long as the doctor is working in the patient's best interest, and the patient has full disclosure of a procedure's risks and benefits. Overall, we should expect that by the beginning of the next century, for at least that proportion of care paid for with public dollars in a basic benefit plan, that the care provided will be necessary care.

To maintain information in the public domain about necessity of care and to update it continuously would cost about \$100,000,000 per year. Congress should fund this public good.

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\* Brook RH, Chassin MR, Fink A, Solomon DH, Kosecoff J, Park RE. A method for the detailed assessment of appropriateness of medical technologies. *Int J Technol Assess Health Care*. 1986;2:53-63

## **Preface**

This publication contains the written statement of Dr. Robert H. Brook delivered on March 2, 1999 to the Senate Committee on Health, Education, Labor, and Pensions. The statement draws on a large body of research conducted over several decades in the United States, Canada, and Europe.



# Ensuring Delivery of Necessary Care in the United States

Written Statement of Testimony Presented to the Senate Committee on Health,  
Education, Labor, and Pensions

by  
Robert H. Brook  
RAND Health

It is a pleasure for me to be here today to describe to you how we can shift the distribution of some of the health care delivered in the US from less than necessary to necessary and, in addition, to ensure that people are offered care that is necessary. I am a practicing internist, Vice President of RAND, head its Health Program, and Professor of Medicine and Health Services at the UCLA Center for Health Sciences.

Let me begin by putting my testimony in the context of three important facts.

- First, the need to improve the necessity of care does not stem from managed care, from utilization review, or from evil insurance companies. There is very little evidence that anyone of these entities have increased or decreased the proportion of care that is necessary.<sup>2</sup> Rather, we need to improve the necessity of care because there is a fundamental problem in the clinical methods that individual doctors and other health professionals use to deliver care to patients. Unless we fix this problem and provide methods that will help physicians produce error-free medicine, we will do very little to improve the necessity of care.<sup>3,4</sup>

There have been many relatively small studies of the quality of medical care conducted in the United States over the past years. Many of these studies predate the emergence, as a force, of managed care. The studies indicate just how variable the performance of the US health care system is. For example, in a recent article in which we summarized 48 of the most recent investigations, we found that 20-30% of the care given to patients is unnecessary; in contrast, patients do not receive perhaps as many as 1/3 of services they should receive, based on the best available combination of professional judgment and scientific evidence, even though they see their physician regularly.<sup>1</sup>

Comparable results can be found in virtually every health care system in the developed world. The results are not affected by whether doctors are in managed care systems; whether they are paid by capitation or salary or bill fee-for-service; or whether they practice in the United States, the UK, or Sweden.

In essence, the U.S. health care system is out of control. It wastes money because it provides care that is not needed. and it causes a great deal of harm because care that is needed is not provided.

- Second, efforts to improve the necessity of care by changing financial incentives, whether directed at the patient or at the health system, have generally failed.

Such efforts can increase the amount of care rendered or decrease the amount of care rendered; but they do not generally shift the distribution of care from unnecessary towards necessary. The one exception to this statement is the provision of insurance to people who have none, which increases the amount of necessary care they receive, improves their health status, and prevents their early mortality.

- Third, necessary care can be measured, with methods far better than relying solely on a physician's clinical judgment.<sup>5,6</sup>

Doctors need help to ensure that their decisions regarding what care will or will not be rendered meet necessity criteria. A recent survey of physicians in California revealed that the majority want such guidelines to help them make better care decisions.<sup>7</sup>

How can necessary care be measured?

We must begin with a definition. In our work we have defined a necessary procedure as one in which the care is appropriate—that is, the expected health benefits to the patient exceed expected risks; the benefit is substantial; and the care is so clearly the right thing to do that the physician would believe it unethical not to provide it and might anticipate being sued, or at the very least be upset or cry if he or she did not offer it to the patient. Of course, the patient always has the right to refuse the offer.

We can use this definition to measure necessity of care in the following way.

- A procedure such as removing a uterus, fixing a back, or doing coronary artery bypass surgery must be identified.
- Scenarios need to be developed that reflect all of the possible reasons that a doctor might choose to do such a procedure. For some procedures, the number of possible scenarios may exceed several thousand.
- A detailed literature review is performed to synthesize the scientific evidence that justifies the indications for which the procedure should or should not be performed. At the very least, evidence tables are produced that indicate the value, in terms of health, of performing a procedure for a specific indication.
- Because the scientific literature does not provide sufficient justification for all of the indications, the analysis of the scientific data must be combined with professional judgment to rate the indications. We use a multi-disciplinary expert panel, nominated by the relevant specialty societies, to fill in the scientific review and to rate the indications.

In sum, the method we have developed combines the best type of group processes with the best synthesis of the scientific evidence. The process produces a series of scenarios for each procedure. Each scenario is rated on a scale of 1-9 for appropriateness,

and then, in turn, each of the appropriate indicators is rated as to whether it is necessary as well as appropriate.<sup>8</sup>

There is no question that such ratings will improve the clinical process. There is also no question that all of the above materials should be made available to patients and to the public, as well as to physicians. They should be used to ensure that all necessary care is provided to all Americans. These strong assertions are based on a set of research studies that we have performed. I would like to share with you some of the key findings from several of these studies.

In the state of New York, we studied the use of 3 cardiovascular procedures, all of which are associated with trying to improve the vascular supply to the heart muscle so that it can do its work more efficiently, and the patient can be more active, free from cardiac pain, and live longer. The procedures are coronary angiography, an inspection of the vessels of the heart; coronary angioplasty, a procedure in which vessels serving the heart are dilated by a balloon to increase blood flow; and coronary artery bypass surgery, in which additional vessels are used to bypass blocked arteries to provide more blood to the heart muscle.

Using the method that I just described, we determined that 2/3rds of the coronary angiographies<sup>9</sup>, 1/3 of the coronary angioplasties<sup>10</sup>, and 80% of the coronary artery bypass graft surgeries in New York state were necessary.<sup>11</sup> The study also revealed large variations in the performance of these procedures across hospitals. For example, in one hospital, 88% of the coronary artery bypass surgeries were judged to be necessary while in another hospital 71% of these procedures were so judged. For coronary angiography, necessity varied from a high of 71% to a low of 49%. For coronary angioplasty, necessity varied from a high of 45% to a low of 24%.

These data, which represent the best data in the world on the necessity of 3 very important cardiovascular procedures in a defined large population, demonstrate that there is much to be done to improve the necessity of care. They also demonstrate that we cannot rely solely on clinical judgment to improve necessity. Improvement without a standardized method or approach is not feasible because each institution and physician develops his or her own culture or style, and the variation in necessity of care is remarkable from institution to institution.

We have also demonstrated in Southern California that necessity of care is a valid concept. Despite the fact that this region has perhaps the world's highest rate of cardiovascular bypass surgery, 25% percent of people who met necessity criteria for getting their heart revascularized did not have the procedure offered to them by a physician. The study also dramatically illustrates that giving people necessary care is crucial for their survival. For example, for those people with left main disease, the most severe form of cardiac disease, 31% of those not offered the revascularization procedure by a physician and who were not revascularized died within the follow-up period; 11% of those who had revascularization suffered a similar outcome.<sup>12</sup>

In a number of other studies, we have shown how necessary care varies by whether one is an ethnic minority or a woman.<sup>13</sup> We have also shown that there is little correlation between the rate at which a procedure is performed in a given geographic area and whether the procedure is done appropriately or not. In other words, living in a geographic area in which a procedure is frequently performed does not guarantee that one will get the procedure when one needs it. Likewise, living in an area in which a procedure is performed relatively infrequently does not guarantee that one will get a procedure that is unnecessary.<sup>14, 15</sup>

I encountered a striking example of this paradox in a region in the UK in which we were doing work to rate necessity. As a physician, I attended rounds and was shown how people with very severe disease were being put on waiting lists to get a cardiac procedure they needed because too few procedures were available. This seemed to make sense because the supply of cardiac procedures in this region of the UK was 1/7<sup>th</sup> that of the United States as a whole. However, I was shocked to find that half of the people who actually got cardiac revascularization did not meet criteria established by physicians in the UK for getting those procedures.<sup>16</sup>

The cardiologists we were working with in the UK were equally disturbed by these findings, because they knew how difficult it was to get their patients a procedure that they needed. They believed that the process of combining the scientific evidence and group decisions must be flawed, that there must be something the clinician knew about the patient that the method for measuring necessity we developed did not account for; or that we had made a mistake in the way data were entered and collected. How could it be that they performed only 1/7<sup>th</sup> of the number of procedures performed in the United States, that people with serious disease were on waiting lists, and, at the same time, that they were doing a large number of things that were considered to be not only not necessary, but not appropriate?

To solve this puzzle, the head of the cardiology department at the hospital spent a week re-reading the records of the patients who were operated on inappropriately. At the conclusion of this exercise, he agreed that the method we had developed and applied to the UK data was correct. Even in an organized system of care with regionalization, centralization of care, high volume of performance, and all those good things that health planners teach are critical to providing a good product; it was possible to have, in the same region, simultaneous gross underuse of procedures for people who needed them and gross overuse for people who didn't need them

So where do we go from here? I believe the next century needs to begin with serious commitment to re-engineer the medical system. Because a large proportion of the U.S. health system is federally funded, Congress must do its part. If the results I shared with you today had come from any other kind of production system, designed to produce reliable jet engines or reliable cars or any other product, we would all be horrified. Why haven't we done something about improving the necessity of care? I think we know how

to begin this activity; and, based on our survey of California physicians, I think it will be supported by the vast majority of physicians and people in the United States.

Here are the basic steps.

First, we need to identify the 60-100 procedures that make up a large part of what we do in American medicine.

Second, for each of these procedures we need to assemble the scientific evidence about the circumstances in which these procedures work and don't work.

Third, we need to develop a set of specific clinical scenarios that encompass all the possible reasons for the use of these procedures.

Fourth, for each of these procedures, we need to convene a multi-disciplinary panel (maybe more than one) made up of physicians from across the country who are involved in all of the specialties that perform the procedure or refer patients for it. These groups would be charged with rating each of the scenarios as to their necessity and appropriateness, based on their reading of the scientific evidence and their own professional judgment, and using the definitions of necessity and appropriateness that I mentioned above.

Everyone in the group should have a vote, and information should be shared in a manner to ensure that one person doesn't dominate the formal group process. The results of this activity should be made broadly available to physicians, patients, the public, and managed care organizations.

Of course, the necessity and appropriateness criteria that will emerge from this process will not be perfect, and there will be patients whom the criteria may not fit; but the appropriateness and necessary ratings represent a good starting point for determining if a procedure is necessary under the specific circumstances. They could also be the starting point for deciding whether a procedure is covered under a basic benefit package. It should be easy for a doctor and a patient, after going through this process and determining that the procedure is not necessary as judged by the above method, to ask for a quick independent review. The doctor and patient would provide additional clinical information to start this process and the results of the independent review if it resulted in changing the necessity determination, would be fed back to the developer of the necessity process to improve it.

Overall, we should expect that by the beginning of the next century, for at least that proportion of care paid for with public dollars in a basic benefit plan, that the care provided will be necessary care.

How much will it cost to do this? Our experience is that to maintain the above information in the public domain and to update it continuously, which would be required given the rapidity in which science changes in medicine, would cost about \$100,000,000

per year. Because this represents a public good, I believe it should be funded by Congress.

Finally, this is America and we are a rich country, and we should allow people to pay out of their own pockets to have care that would be considered not necessary by this process. For instance, let us say that a middle-aged man wants his prostate removed for mild symptoms of prostate disease, which could include something no more onerous than getting up once during the middle of the night to urinate. Should that patient be denied access to this procedure because the scientific evidence, coupled with a group process, judges the procedure to be inappropriate under these conditions?

The answer is, “Of course not.” But neither should the government be required to pay either directly or indirectly through tax subsidies for that care. Insurance plans to be purchased with post-tax dollars should be available to give patients and doctors the right to choose any kind of care they want as long as the doctor is working in the patient’s best interest, and the patient has full disclosure of a procedure’s risks and benefits. The starting point for such a discussion between the patient and the physician would still be the ratings and methods described above. Such insurance plans may turn out to be very expensive, and I doubt whether many people will purchase them. Nonetheless, they could be offered.

However, for most Americans, improving the doctor-patient relationship as described above will provide very good health care—care that is certainly much better for them than is currently being provided in the US health system. The federal government’s investment to begin that process is not large. In a health care system that costs over a trillion dollars, investing \$100,000,000 in tools to help re-engineer it, although not chicken feed, is certainly not exorbitant.

We can reduce the chaos that is produced by the current system, whether it be managed or not. We can make sure that Americans get services that are needed and don’t get services that will do them more harm than good. There are tools to make this happen. Like any scientific tool, they will constantly need to be improved, but they represent a wonderful place to begin. They hold the promise of improving the satisfaction of patients when they see doctors, and the satisfaction of doctors in the practice of medicine.

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