

RATIONING OF MEDICAL SERVICES: PROFESSIONAL ETHICS,
GOVERNMENTAL REGULATION, OR MARKETS

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RATIONING OF MEDICAL SERVICES: PROFESSIONAL ETHICS,
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Comments on the papers by Culyer, Maynard, and Williams;
Reinhardt; and Stahl

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We might begin a discussion about the rationing of medical services by asking what determines the volume of resources a country devotes to medical care--for that, after all, will fundamentally determine the severity of the rationing that its residents face.[2] It turns out that the answer is surprisingly simple. Per capita GDP can explain an extremely high percentage of the variance in per capita spending on medical care across countries. Stahl estimates this percentage as 85; using a somewhat different sample, I estimated it to be even higher (Newhouse 1977). Irrespective of the exact number, when one considers the amount of measurement error in expenditure figures because of non-

[1] This paper was prepared as a commentary on three papers presented at the American Enterprise Conference on Rationing of Medical Services. The papers and the commentary will subsequently be published by the AEI.

[2] Rationing, as used here, includes the whole structure of relationships that determines the volume of and distribution of medical care resources. It does not refer to a particular method of distribution, for example, centralized allocation of physical quantities.

comparable definitions across countries, this high an R2 is indeed impressive. It is hard to imagine that anything other than income could be of much importance. The other interesting finding from these studies is that the income elasticity exceeds 1.0; hence, one might expect disproportionately less severe rationing as income grows. One might also expect that exercises designed to keep the growth of health expenditures at the same level as GDP may not be well advised, as Reinhardt notes.

Descending from the level of the country, we come to rationing of resources among regions within a country. Stahl suggests that in Sweden income is also an important determinant of the quantity of resources across regions. A similar result appears to hold in the United Kingdom, given the greater endowments of London, and would also hold, when computed in the same fashion as in these papers, in the United States.

When considering regional differences, however, border-crossing for medical care can confound the interpretation of the extent to which income determines the severity of rationing. Large cities will tend to have higher income and also be the location of specialized services; hence, those regions with large cities will have somewhat better endowments than other regions.

Border-crossing to utilize specialized services can appreciably narrow apparent discrepancies in physician endowments. For example, the number of board-certified surgeons per person in metropolitan areas of the United States is approximately double that of non-metropolitan areas, but that does not imply that rationing is nearly twice as severe in non-metropolitan areas. Approximately 30 percent of operations on

non-metropolitan residents are done in metropolitan hospitals by, let us assume, metropolitan surgeons (Fuchs 1978). Adjusting for this border-crossing closes about 60 percent of the gap between metropolitan and non-metropolitan areas in surgeons per person. Another 20 percent is closed by the reduced hours that surgeons in metropolitan areas work. Thus, it appears to be not nearly as difficult for a non-metropolitan resident to have surgery done by a board-certified surgeon as the discrepancy in surgeons per person would make it appear.

One possible reaction to this line of argument is that it would be much better for non-metropolitan residents not to have to travel to metropolitan areas; such travel does, after all, impose a cost that metropolitan residents do not have to bear. Although this is perfectly true, it has been argued that the technical quality of medical care would be higher if surgery were still more regionalized--which in this context probably implies even more border-crossing (Bunker, Luft, and Enthoven 1979).

To sum up, residents of poorer countries almost certainly face considerably more severe rationing of medical services, but residents of poorer regions face such constraints to a lesser degree because a number of them travel to wealthier regions to receive care (and because physicians in metropolitan areas work fewer hours). This complicates determining the severity of rationing among residents of different regions.

Let us now descend to the most micro level--who receives what kind of care for what kind of problem within a region or market area? Here all three influences in the subtitle of the conference will play a role.

I begin with government regulation. Much is written about its effects, yet my guess is that in the USA regulation of the certificate-of-need variety has not yet had a terribly large effect on exactly how different individuals are treated. (See, for example, the paper by Paul Joskow presented at this conference.) But actions of the government that are not usually classified as regulatory clearly have had a critical influence on the nature of rationing. One of the most obvious was the policy of the past two decades to increase the output of medical schools. That increase should profoundly affect who receives what kind of service for what kind of problem over the next two decades. The enactment of Medicare and Medicaid has also clearly affected the distribution of services; for example, hospital days were distributed away from the under 65 to the over 65 after the passage of Medicare (National Center for Health Statistics, 1967, 1973). Moreover, physician visits by income class now resemble a shallow U for both adults and children, whereas before Medicaid was enacted visits rose steadily with income (National Center for Health Statistics, 1965, 1979).

In the USA the market also clearly plays a role in who receives services. The questions usually raised in this context are whether it should play a greater or smaller role.

Those favoring a greater role for the market usually focus on the current lack of competition and the resulting loss of efficiency, especially in the hospital sector. Stahl makes this argument in his paper. This field has been well plowed, and I do not propose to till it again. Suffice it to say that a potential drawback to increasing

competition is the possibility that an equilibrium would not exist and that poor risks would be discriminated against. Healthy individuals have, in effect, an incentive to run away from sick individuals, with the sick individuals chasing after them (Rothschild and Stiglitz 1976). We know rather little about the extent to which such problems arise with competitive arrangements (Luft, in press).

Those favoring a smaller role for the market usually focus on the equity issue; the typical argument is that reduction of consumer payments will reduce the inequality in use of services across income classes. All three papers discuss this issue.

Contrary to the popular view, economic theory does not give an unambiguous prediction about how a reduction in out-of-pocket price will affect different income groups. Culyer, Maynard, and Williams cite the Montreal experience in support of the proposition that inequality will fall as out-of-pocket costs fall, and the Saskatchewan experience (Beck 1974) also supports this view. But other evidence is less clear. LeGrande (1978), for example, in a study cited by Culyer, Maynard, and Williams, estimates that expenditures in the National Health Service for Social Classes I and II (professional and managerial) are around 40 percent higher than for Classes V and VI (semi-skilled and unskilled labor). (The calculation roughly controls for health status.) The US doesn't have an exactly comparable statistic, but use of hospital days and physician visits across income classes, also roughly controlling for health status, suggests near equality (Aday, Andersen, and Fleming, 1980, Tables 3.24 and 3.26). There are certainly issues of equity in the US system, as Culyer, Maynard, and Williams point out, but the

LeGrande figures, if correct, make it difficult to argue that less reliance on the market will unambiguously reduce the role of income in allocating medical resources.

What might cause the LeGrande results? Both Culyer, Maynard, and Williams, as well as Stahl, raise the role of professional preferences for patients, which might also be called professional ethics. Clearly physician preferences or ethics do play an important role in all systems, although that role is not well understood. For example, there has been a marked decline in the tonsillectomy and adenoidectomy rate in the USA over the past several years (Table 1). It is certainly difficult to account for this decline in terms of regulatory forces. If market forces account for the decline, they are stronger than usually given credit for. The decline seems likely caused by a changed medical view of the efficacy of this procedure. Such an explanation, centered around professional ethics, fit uncomfortably with many models of how the fee-for-service physician behave.

Not only has positive economics to date had relatively little to say about the role of professional ethics, normative economics has also had little to say. Reinhardt points out that several Western European nations espouse the normative criterion that all technically available care should be equally available to all, a principle of solidarity. "Everyone should be in the same boat." The Culyer, Maynard, and Williams paper also alludes to universal access to care as a criterion. Reinhardt contrasts such a criterion with one that makes certain minimums available to all with inequalities permitted, apparently the criterion in the US.

Although the solidarity criterion may seem sensible to some, I do not find it a practical one, for reasons that fall in the area of professional ethics. (The second or "minimums" criterion is less vulnerable on this score.) Consider how one might know if the solidarity criterion had been satisfied; that is, consider how one might implement such a criterion. How would one give the US or the UK systems a report card on this score, as Culyer, Maynard, and Williams seek to do? To implement this criterion seems to presuppose that there is a unidimensional, readily observable measure of health status with negligible heterogeneity among individuals in their valuations of health. (Or, if there is more than one dimension of health status, marginal rates of substitution are well defined.) I doubt that any of these conditions obtain. The difficulties are readily illustrated with some examples.

Individual A is a child with asthma; individual B is a child that needs orthodontia. Who should receive treatment if treatment is equally costly and resources suffice to treat only one? Individual C is a teenager with acne; individual D is a teenager with hayfever. Who gets treated? Individual E is an adult who needs psychotherapy; individual F is an adult who needs physical therapy to recover from a stroke. Who gets seen? Clearly no one, including the physician, has a sufficiently good health status measure to determine that treatment would give child A 3 units of health status, but child B only 2 units; hence, child A gets the resources. Nor do we know anything about how the individuals value remediation of these problems. Acne may pose a serious social problem for one teenager, but hardly bother another.

One response to this problem is that such decisions must be left in the hands of the physician to be determined, presumably, by professional ethics. Clearly that answer begs the question. We have no way to measure how well the physician does in resolving such issues, but it is clear that all individuals will not necessarily have equal access to all available care; i.e., they will not necessarily be in the same boat. If individual E, who needs psychotherapy, is perceived as a hypochondriac, while individual F, who needs physical therapy, is perceived to have more "legitimate" needs, the system may not give the two individuals equal access. Put another way, potential inequalities across persons with different medical problems may well exceed those across persons of different income or education, yet attention seems devoted almost exclusively to the latter.

To complicate matters we cannot pretend that a single practicing physician is resolving these problems. Many, if not most, medical problems are not treated by a single physician, but rather treated by specialists with specialized resources: psychiatrists, orthodontists, dermatologists, physical therapists, allergists, and so forth. Thus, exactly which specialists and specialized resources are available will importantly determine who gets seen for what type of problem. To what degree can the objective of equal access be considered when policymakers make decisions affecting the availability of resources?

I will give one more example, because the point seems quite important. I'm told the National Health Service rarely dialyzes any patient with end-stage renal disease over the age of 45 and also does rather few coronary bypass surgeries. Both services seem rationed more

severely than in the USA, but that is not the point of interest here. (Almost certainly one could find some services that are rationed less severely in the UK.) How does one say that this distribution is more equitable than doing dialysis on people to age 50 and even fewer bypass surgeries? Or dialysis to age 40 and more bypass surgeries? Which of these allocations best satisfies the principle of solidarity? Or is fairest? Are they all equally fair? Are people with renal failure and people with coronary artery problems really being treated equally?

In short, individuals have different kinds of medical problems, and even those with similar problems may feel differently about the need for treatment. It does not seem likely that equity will be achieved merely by making money prices zero and time prices negligible. To so hold requires a rather large leap of faith, namely that individuals situated differently with respect to medical problems are treated equitably when we have no ready method to measure equity. To rest the case for equity solely on the distribution across income classes appears to assume that if the distribution among income classes is equitable, only minor inequities are left. But what if income inequities are only one inequity amidst many?

I cannot enter here into a further discussion of this issue; merely call attention to it. But I would guess that investigation of how differently situated individuals are treated, especially as the overall volume of resources varies, would be fruitful to explore.

St. Matthew seems to be somewhat in vogue at this conference. But unfortunately we do not live in a world he chronicled: "Everyone that asketh receiveth, and he that seeketh findeth." Medical resources are

rationed in every society, and everyone that asks does not receive. As this conference has brought out, we really know rather little about who does and does not receive. If the conference succeeds in promoting additional research into these issues, it will have served its purpose well.

Table 1

RATE OF TONSILLECTOMY, WITH OR WITHOUT ADENOIDECTOMY,
(Operations per 1000 persons, 15 years or under)

| <u>Year</u> | <u>Male</u> | <u>Female</u> |
|-------------|-------------|---------------|
| 1965 | 16.3 | 16.5 |
| 1968 | 14.3 | 13.7 |
| 1973 | 11.1 | 12.1 |
| 1975 | 8.5 | 9.1 |

Sources: National Center for Health Statistics, Vital and Health
Statistics, Data from the National Health Survey, Series 13, Nos. 7, 11,
24, 34.

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