## Quality of Care and Unnecessary Operations: A Comment on *The Condition of Surgery*

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I served with SOSSUS in my professional capacity as a biostatistician. I am not familiar with the substantive fields of either surgery or economics. Over the years, however, I have worked with surgeons and economists and have learned much about them. Not until SOSSUS did I work with the two together and realize how synergistic—and volatile—is their combination. Although I cannot claim impartiality, I can claim lack of vested interest in both fields. I should like to respond to Dr. Blackstone's analysis in part as a professional and in part to set forth my own views as a lay-consumer of both surgical and economic services.

Dr. Blackstone has given much thought to the SOSSUS report and provides many useful insights into the economic interpretation. Toward the end of his analysis his speculations on the consequences of a policy of restricted entry into surgery are most interesting, but, of course, entirely conjectural. There are two particular issues, namely quality of surgical care and unnecessary operations, about which I feel Dr. Blackstone has been unduly critical. As I recall, SOSSUS—or at least, its Manpower Committee—never intended to study these issues. Both issues require follow-up data on the outcome of surgical intervention—data which were quite beyond the scope and resources of the Manpower Committee. My understanding of the terms of reference of the Manpower Committee was that it gather the pertinent data to understand the patterns of distribution of physicians, in particular how they allocate their time among the various professional activities and what are their operative workloads. The issues of quality of care and unnecessary operations were simply not within the purview of the Manpower Committee.

I agree that data on quality of care and unnecessary operations would be most valuable in gaining a global picture of the practice of

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surgery in the United States. It should be emphasized, however, that these areas present difficult technological and conceptual problems. It is much easier to bandy about the phrases "quality of care" and "unnecessary operations" than it is to define these terms and obtain clear, accurate, and sensitive indices of the issues involved. Recently, a series of attempts has been made to apply techniques of decision theory in a risk-benefit appraisal of several specific surgical operations (for example, elective inguinal herniorrhaphy in the elderly, cholecystectomy for silent gallstones, elective hysterectomy in premenopausal women without uterine pathology, and coronary artery by-pass) (Bunker et al., 1977). These analyses well illustrate the complexities involved in determining whether an operation is or is not necessary—whether its sum total benefits outweigh its sum total risk.

To my knowledge, there is no generally accepted objective method of measuring the quality of surgical care. One could, of course, assess postoperative morbidity and mortality, but many would say that these are not the only results that reflect quality of care or that these are the most specific and sensitive to variations in quality. Undoubtedly, objective assessment of the quality of surgical care shares some inherent difficulties with objective assessment of the quality of an economic analysis.

From my own experiences in receiving personal services from professionals—both in medical and other fields—I am much perplexed with Dr. Blackstone's argument against board certification under the authority of the surgeons. Who else can better assess a professional's competence than his professional peers? When someone has a tax problem, a legal problem, a general medical problem, or a specific surgical problem, he most often seeks services from a certified professional in the field. It is some comfort and assurance to the individual to know that the professional has been judged competent in his training, experience, and success in providing his particular services. I see much to be lost and little to be gained by placing the certification process beyond the profession, whether the profession be surgery, medicine, law, or accounting.

Dr. Blackstone seems to voice the complaint that consumers lack adequate information about surgical treatment. This, I find, is a most difficult issue. On the one hand, one would, under ideal conditions, provide the consumer with sufficient information to judge rationally what is his best course of action. On the other hand,

it is not realistic for the consumer to have such information. Even if he had it, at the time for decision he would not necessarily be in an emotional state in which he could make rational decisions regarding his options. I am certain that even the certified surgeon who has a personal surgical problem himself or in his family relies, very much like the totally uninformed consumer, on the skill and judgment of the surgeon he consults. Clearly, a good part of "professionalism" is putting oneself in the hands of the expert who, with his knowledge, experience, and skills, and with a certain emotional detachment, can advise and guide rational courses of action. I believe this holds true for both medical and non-medical professionals who deal in personal services. Dr. Blackstone's suggestions—for example, changing the authority of board certification and proliferating surgery among those without certification in an effort to increase competition and reduce prices—would do much to undermine the basic professionalism that exists in the field.

I am particularly puzzled by Dr. Blackstone's suggestion to dispense with the requirement of completion of an approved residency program and to award certification solely on the basis of tests for competence. Certification for professional practice attests to far more than acquisition of technical skills and a body of knowledge. Demonstrated mastery applied under a variety of contingencies in ethical ways is what is certified. And I know no way of certifying such competence other than through observing conduct in practice. That, it seems to me, is the purpose of supervised periods in residence for any professional aspirant.

Finally, there are a number of technical points that Dr. Black-stone raises that deserve comment. He claims that surgeons have shorter work weeks than general practitioners and cites a study by Owen. It must be emphasized that the SOSSUS figures on work weeks were constructed from the results of a questionnaire in which physician respondents catalogued their professional activities for specified randomly selected days. The method an investigator uses for securing information on workdays or work weeks is crucial to the estimate he obtains. Unless the study of general practitioners used essentially the same method, the estimates of work weeks are not comparable. A study of faculty at Harvard Medical School which used a method analogous to that of the SOSSUS study did reveal similar average work weeks among Harvard physician faculty members and SOSSUS surgeons.

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Dr. Blackstone states that non-certified surgeons have lower fees than those certified. He provides no source for this fact. No such information was collected in SOSSUS. We do know that non-certified surgeons have lower operative work loads and lower net income, on average, compared with certified surgeons. They have lower operative workloads because they tend to perform fewer operations, and less complex operations at that. We had no data that would indicate that physicians without surgical certification charge, for the same services, lower fees than certified surgeons.

Dr. Blackstone states, ". . . the Report presents insufficient evidence to conclude that general practitioners and other noncertified surgical specialists cannot do the less complex procedures." In further published material from SOSSUS (Nickerson et al., 1976) we did consider this in our various plans for reallocation of operative work. Dr. Blackstone has reviewed this work along with the SOSSUS report as evidenced by his reference to it in his commentary. I venture there would be little argument with the physician without surgical certification performing the less complex surgical procedures. It is with the more complex operations that the controversy arises.

In my judgment, the value of SOSSUS is enhanced by the critical interpretations and interesting speculations provided by Dr. Blackstone. These economic insights, and those of decision theorists, add to our cumulative knowledge of the potentials for more definitive national manpower planning and of the problems which yet remain.

## References

Bunker, J.P.; Barnes, B.A.; and Mosteller, F. 1977. Costs, Risks and Benefits of Surgery. New York: Oxford University Press.

Nickerson, R.J.; Colton, T.; Peterson, O.L.; et al. 1976. Doctors Who Perform Operations. *New England Journal of Medicine* 295: 921-926, 982-989.

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