Interview

Avedis Donabedian: an interview

Richard Baker

RB: What are your impressions as to how the quality industry has changed and developed? You started it off, but a lot has happened particularly in the past five or ten years. Governments and health services have become interested in quality, what have you made of that process?

AD: If we restrict ourselves to the past five or ten years, I think the major development in the United States has been a widespread interest in quality assurance and quality monitoring, an interest in supervising the performance of the system so that one is assured of quality, or perhaps more narrowly, of value for money spent.

That has developed along three or four major lines:

- In government, mainly the federal government, but also state governments
- In the more traditional insurance companies, whether commercial or voluntary
- In large scale purchasers of care, whether they are unions or associations of business people and industrialists or individual industrialists – for example, large companies like IBM or Xerox
- In certain organised consumer interest groups.

I think these are the major organised foci for an interest in quality. There is a fair amount of publicity, a fair amount of newspaper coverage, but I have no feel as to how involved individual consumers are and how aware they are of the issues of quality, quality supervision, and quality assurance.

Every year the federal government publishes mortality statistics comparing the performance of each hospital with an expected value that is derived from the average performance of all hospitals; and of course some hospitals fall below that value and some fall above. There is a certain amount of correction for factors that would influence the outcome of care independently of quality. It looks as if, although the newspapers provide a fair amount of coverage, most emphasise, of course, the performance of hospitals in their own area. There really is no evidence that people use that information in any useful way to choose doctors or hospitals. In any case the information is not available about doctors; it is available about hospitals only.

A review of the literature, not a very deep one but a cursory review, suggests to me that

most people simply don't know what to make of that information. So individuals may not be terribly involved, but people who represent them are – for example, consumer interest groups, business enterprises, employers, unions, and the health maintenance organisations (HMOs) to which individuals belong. If they are enrolled in an HMO, that HMO will be interested in quality issues, and more and more interested in having contracts with hospitals that provide reasonable quality at a lower cost. Still, I think that savings in cost are the dominant moving force as far as major purchasers are concerned, whether they are private or government owned.

So quality appears mainly in the guise of value for money. I don't think it appears as a separate objective, in the service of which large scale purchasers are willing to pay extra money. They have the money and they want to get the best quality for the money they have, rather than being aware of quality deficiencies and saying, "look if you give better quality we'll pay more money." I could be wrong but that's my interpretation. I think that's all I have to say in response to your question about the greater interest in quality.

As to quality assurance, at the federal level, in the programme that attends to quality of care in the Medicare programme, what has developed more recently has been abandonment of the older PSRO approach [the approach of the Professional Standards Review Organisations], their dissolution, and the establishment of a new similar programme called the PRO, the Professional Review Organisation. I think the hallmark of this new approach is greater directiveness by the federal government. There was more delegation to physicians in hospitals and a greater willingness to allow them to make decisions on their own in the older programme. Failure of that older programme seems to have resulted in a determination by the federal government to be more directive and to specify in greater detail what the PRO is supposed to do and to demand proof of performance from the PRO as well as action to censure physicians. This has been a rather bureaucratic, rather repressive approach, close to policing in its essence and less in keeping with the older traditions of professional autonomy.

A new third force has been the appearance in health care of advocacy for the so called industrial model. Its proponents were

originally people like Deming and Juran. Apparently, these thinkers and planners were at first ignored in the United States. But their teachings were accepted in Japan and implemented in manufacturing, though not in the service industries there. I have asked physicians from Japan who have come to visit me, "Do you practise these principles in your hospitals," and they all say, "No." So in Japan there is a dichotomy between the service industries, including the health care system, and manufacturing industries. In the latter these methods of quality assurance were adopted and further developed and elaborated, whereas physicians from the hospitals of Japan still come to the United States sometimes to talk to me. When I say, "But you know all of these things," they say, "No, we don't practise those things." Anyway, the fact that Japan has been so successful industrially and has competed so successfully with business in the United States has impressed Americans very greatly. There is almost an obsession with the success of Japan, because Americans have always felt that they were pre-eminent in industrial production, whereas now they are seemingly being beaten by the Japanese on home territory. I think this obsession with Japan has created an interest in their methods, and at least some firms in the United States have adopted the industrial quality assurance and quality improvement techniques advocated in Japan, apparently with anecdotal evidence of success.

Recently I read in *Newsweek* magazine, that there is a disillusionment setting in. Several large firms say they have tried the method, but it's too costly, it does not produce results, and is not worth the effort that goes into it, a reaction that could have been predicted because the Japanese have always said that their quality assurance activities are not the only reason for their success. There are many other aspects of Japanese life and culture, including the relationship between the Japanese worker and the Japanese firm that are responsible for success, and their method of quality assurance will not produce results unless one is willing to stay with it, to practise it over long periods of time, to be persistent and to put in the necessary commitment and effort. So that's the story as far as the industrial sector is concerned: adoption by some, a great deal of enthusiasm at least in some sectors, but a beginning of disillusionment in others, possibly because the method is not being properly applied, or the amounts of energy and resources needed for its success are not there.

Now about the transfer of some of these ideas into the health care system. There have been a few advocates of this approach in the health care system. It is being presented by them, it is fair to say, as rather new, rather different, and superior to the more traditional methods of quality assurance in health care. But I believe that this is in some ways an illusion created because these new advocates are simply not sufficiently familiar with the health care models that have been developed

over many years, certainly for the past 50 years or so. They equate quality assurance in health care with the less attractive, more highly bureaucratic forms of quality assurance advocated and practised by our federal government and our other bureaucracies. So they are comparing the worst in quality assurance in health care, as we understand it, with the ideal as it appears in the writings of those who have developed the industrial model; and that seems to me to be a grossly unfair comparison.

. . . the features of the industrial model [of quality assurance] are being misunderstood and misrepresented.

Besides, I believe that in some ways, many or at least some, of the features of the industrial model are being misunderstood and misrepresented by those who wish to apply it to health care. Therefore, in a large part our own tradition is misunderstood and misrepresented and to a lesser degree I think the fundamental qualities and properties of the industrial model are also misunderstood and misrepresented. The result of these two misrepresentations, one large, the other relatively small, is an enthusiastic advocacy for applying to health care a modified form of the industrial model as developed by its originators. Besides being very enthusiastic, I think that the people who advocate this are well intentioned and, in general, have a good product to sell. I use the word "sell" advisedly because some advocates of the industrial model are consultants who sell the product and sometimes oversell it, or sell it under somewhat false colours.

These are, I think, the major new developments, with one exception. Namely, that advocacy for the industrial model seems to have found a certain degree of receptiveness in the federal government. Those responsible for the quality of the Medicare programme of the federal government are beginning to think in new terms, moving away from the emphasis on identifying outliers (meaning those physicians or institutions that seem to be aberrant and therefore possibly practising medicine that is not so good) and contemplating a more epidemiological approach. This means studying patterns of care, identifying variations in care, trying to explain these variations, and adopting a more educational and research oriented policy. These are very new proposals; they have just come to my attention, but I think they will bring quality assurance under government auspices more in line with some of the features of the industrial model. But at the same time, very interestingly, also more in line with more basic principles, orientations, and values in our traditional health care models. Whether these proposals will be implemented, how well they will be implemented, how much success

they will find, how well they will be received by the medical profession, remains to be seen.

Consumer centred approach

RB: There are two things about the industrial model that are perhaps new – the focus on the consumer and the style of management – the people centred approach. Are those new ideas, how do they relate to our profession?

AD: It's very difficult to say that we have anything to learn from the industrial model in terms of consumer centredness because our entire health care tradition is centred on the patient; we are trained and motivated to serve patients, that is the *raison d'être* of health care. I find it really quite insulting for someone from industry to come and tell me to be consumer centred, or for the advocates of the industrial models in health care to tell me that we ought to become consumer centred, because we have always been patient centred.

I think industry has more to learn from us about how to be consumer centred than that we have to learn from it. But consumer centredness means something quite different in industry compared to health care. In the industrial model the emphasis is on finding out what consumers wish and desire, to plan and design products that meet those desires, and to make sure consumers are satisfied with, even enthusiastic about, a manufacturer's products so the producer can maintain a position of being favoured by consumers. I would call this catering to consumer desires and wishes. It is felt that this is very advantageous to the producer because it results in greater sales and therefore one can make better products, perhaps even more expensive products, and recoup the extra expense through larger sales and by becoming the dominant producer in a given sector of consumption and production.

---

*. . . we are constrained to work
with patients, seeking what is
best for them.*

In health care, we have a different kind of consumer centredness, and that is seeking what is best for the patient. I think that differs from doing what the patient desires. We need to take into account what a person wishes or desires but we are constrained to work with patients and, if necessary, to alter those desires so that they are more in line with the long term interest of the individual. We cannot simply do what individuals want. Our concern for the patient's best interests may forbid us from doing something that a patient may want done. Rather we are constrained to work with patients, seeking what is best for them. At the same time we have other objectives and social responsibilities that impinge on the decision of how to treat an individual patient. We have

considerations like equity, for example, or protecting the interests of the population as a whole. While similar concerns may be found in industry they are much less dominant and much less compelling there. So, as far as consumer centredness is concerned, I think that we have nothing to learn from industry. Or perhaps, what we have to learn is simply a reinforcement and revivification of our own commitments. We can tell ourselves that if industry is emphasising consumer centredness how much more must we be faithful to our own traditions of consumer centredness?

Industry, I believe, has been managed, by and large, in a highly bureaucratic, authoritarian way. Top levels of management have issued orders to intermediate levels and the intermediate levels to lower levels all the way down to the production worker, who is like an automaton, who must do what higher echelon people tell him; so we have a very hierarchical system with many layers, each subservient to the layer on top. This is the traditional model of the industrial bureaucracy. Now we have advocacy for a new style of management which derives largely from the human behaviour school of organisational theorists, a school that has passed its heyday, having been modified by the organisation theorists themselves. Still, this approach although a little behind the times, is very attractive, and I find it extremely persuasive. Speaking as someone who is not an organisational theorist I would like organisations to run in a less hierarchical, more consultative way, with more power at the lower echelon and with the directorate providing help, consultation, and encouragement rather than simply issuing orders, being more ready to listen as well as instruct.

But if we look at this new management style and the organisational structure that is associated with it, we find that it conforms to what organisational theorists call a professional bureaucracy – sometimes a semi-bureaucracy or a quasi-bureaucracy. If you were to look around for examples of this style of management you could find two. One would be the way good academic institutions are run and the other the way the medical department of a teaching hospital is run. Here the chief is a senior consultant, a friend, who provides advice, very often waits to be asked, and seldom issues orders; subordinates speak to their seniors rather freely, offering suggestions. There is here a kind of collegial relation which is quite different from the superordinate – subordinate, bureaucratic structure that has been traditional in industry.

So I would consider advocacy of this style of management as an attempt to recast traditional industrial bureaucracy into a form of organisation which is typical of the professions; I would see it as a professionalisation of industry. I see the industrial model as belatedly adopting forms of governance that are traditional in our field, at least as far as physicians are concerned. It brings us nothing new. But strangely enough, even as some people in the health care field are proposing a greater bureaucratisation of our own system,

the industrialists having tried the more traditional forms of bureaucracy find that the professional bureaucracy is probably more conducive to quality than the older forms. So again we learn nothing new from industry except that our traditions have been sound. And perhaps that we ought to expand our approach to other health care professions – for example to nurses. Why should nurses not be more self governing? Why should therapists in any other field not be more self governing? And, in fact, why should not other workers in the service aspects of the health care system not be more self governing, more autonomous, be allowed greater responsibility to monitor their own work, enjoy greater opportunities to improve their performance, to act essentially the way professionals are supposed to act?

These are the conclusions I would draw from the industrial model of quality assurance and its apparent success. I say apparent success because much of the evidence for the success of the industrial model comes from Japan. But the Japanese have said very clearly that their success is not due to this one particular method of quality assurance. It is the result of a whole constellation of factors that have contributed to the Japanese industrial renaissance. If we leave that aside, the evidence for the success of the industrial model is anecdotal, as is the evidence for its lack of success. I have not seen any controlled experiments comparing variants of the industrial model with other models. Lacking rigorous field trials, the case for the industrial model is only persuasive, nothing more.

We have in our own literature, reporting experience with our more usual kinds of models, similar stories of success. We also have stories of failure that we have published, not suppressed. But we don't have much in the form of controlled studies, so we are essentially more or less on similar ground in so far as proving or disproving the effectiveness of our own models. Still, I am by temperament, and by virtue of having always worked within a professional bureaucracy, as a physician and as an academician, in favour of less bureaucratic forms of governance. This is what we've had all along in our medical sector, by which I mean physician self governance, and I would like to see that expanded and extended to include others as well. I would conclude that two important features of the industrial model (consumer centredness and de-bureaucratisation) are not strangers to our own traditions, but actually are in line with our traditions. If in fact the industrial model is good, then our traditions, for a long time, have been good as well.

Rationing health care

RB: Following on from that, I'm reminded of your writings some years ago when you were discussing the judges of quality, you said that your preference was for quality to be judged according to an agreement between patient and physician. Because of greater concern about costs, society is more concerned with

rationing, and wishes to make health services more efficient. It appears that the patient and physician together are no longer the prime judges of quality. Do you feel that that is actually happening?

AD: With respect to efficiency there is absolutely no conflict between what patients desire, what physicians should want, and what those who are responsible for financing everything should want or do want. Mainly, we want good care or care that is equally effective at lower cost.

When the financing of health care services is entirely, or almost entirely, the responsibility of some social organisation like the National Health Service, it is likely that individuals will have less interest in the issue of efficiency than if they were paying part of the cost. Paying at least part of the cost enhances interest in efficiency. But those who do not pay would probably, most of the time, not object to efficiency as long as it does not mean that the effectiveness of care has been reduced – that it is being produced only at a lower price. They would object however, if asked to bear costs that otherwise they would not bear – for example, if health care is paid for entirely if the patient is in hospital but not entirely if the patient is sent home, or there are additional expenses that a person incurs when he or she goes home. Then home care could be more efficient for the system as a whole, but not be more efficient for patients because it would be more costly to them.

So, depending on the incidence of costs, patients would be more or less or equally sensitive to the issue of efficiency. This means that the incentive system has to be very carefully looked at so that the incentives to efficiency for physician, patient, and system are congruent rather than discordant. There is no fundamental incongruity or conflict in the pursuit of efficiency. There are only some aberrations that need to be attended to.

As to defining quality, I think it is in the interest of the physician, the patient, and society that the patient's desires and wishes are to the extent possible, respected, unless there is enormous cost involved. This includes attention to the amount of time to see patients, appointment systems, waiting in the doctor's office, the amenities of care, office arrangements, accessibility, and so on. There has to be a balancing of what the system is able to pay for and what people want, but, in general, all parties are pursuing similar objectives, not different ones. The criteria of quality are the same. The definition of quality includes what is convenient and pleasant for patients, what patients like and find congenial and comfortable.

Patients also define quality in terms of what objectives they wish to attain. Again, I think that there is very little conflict here, except perhaps for a lack of attention on our part to what patients want. For example, patients may value longevity and various aspects of the quality of life very differently from how physicians may value these same things. It's

very important, then, for the physician to find out what the patient desires, to explain the various outcomes associated with alternative forms of treatment, and to arrive at the kind of treatment that meets the patient's definition of what is good, assuming there are alternatives and the gravity of the situation justifies this kind of attention. Again, with respect to these matters I see no conflict between what society wishes, what the patient wishes, and what the physician should wish. The physician should simply pay more attention to making a partner of the patient rather than making decisions on the patient's behalf. The doctor should try to find out how the patient regards his or her personal best interests and, in a collaborative discussion, make a joint decision as to what is best for the informed patient.

The next step, which is that of rationing, introduces real conflict. At this point there are things to do that the doctor knows are good for patients, the patient wants them, the doctor wants them, but they are not available because there are other things that society wants to do with the money. That could be other kinds of health care, or other things more or less conducive to health and welfare, such as education, recreation, and economic developments or national defence. That is when a problem arises and there is real conflict. I believe that this conflict is inevitable so long as there is social financing so patients are relieved from paying directly for health care. But this problem could still exist if patients were to pay for their own health care. If patients could not pay for health care, and as a result could not get certain treatments that are good for them, while others could, then society would be called upon to intervene in some way, to redress what might be seen as an injustice.

... in rationing, conflict is inevitable and the only solution ... is that physicians be allowed to do the best for each patient.

My feeling is that rationing is inevitable. It takes place all the time. The only solution (or at least one solution which appeals to me) is that rationing decisions be made at a social level, through regulations, or methods of financing, or the control on technology. Such decisions are seen as impersonal, not involving an individual physician taking care of an individual patient. Within constraints created by these impersonal forces, each physician would do the best he or she can for each individual patient, at the same time explaining to the patient what the constraints are. An explanation is necessary because patients, as citizens in a democracy, have to participate in making collective decisions; unless they understand why certain things are rationed they cannot make the appropriate collective decisions as citizens. So they must be

instructed constantly by their physicians and by the organisations of physicians and other consumer groups. So in rationing, conflict is inevitable and the only solution I see is that physicians be allowed to do the best for each patient. Otherwise, the trust that must be maintained between patient and doctor would be eroded, and I think that the results would be disastrous.

RB: I was wondering, how should I respond, as a physician, when confronted with rationing for a particular patient; when I know that I can help that patient with a particular procedure and it's not funded, and the patient cannot pay for it. What should I do?

AD: This is a difficult question because I don't face it and therefore maybe I'm prepared to answer it in a totally unrealistic way. It seems to me, at least I would like to suggest, that a doctor should not tell the patient that's all that can be done for him, and only help the patient adjust to the situation to the extent possible by alterations in his style of life or expectations. I think it would be more ethical if you, the physician, told the patient, "This is the situation in your case," for reasons that you will explain. "This service could help you but is not available because I'm unable, not allowed, to provide it" and explain why. Some people would think that this is cruel and that it would be kinder to leave the patient in ignorance of what could have been done, but cannot be, because the sense of deprivation would then not be so great.

I sympathise with that and I think that's possibly an acceptable reaction. Yet I feel that if we continue to conceal from our patients the opportunities that are denied them by the absence of funds, especially if these opportunities are available to others who have the means, we are then partners in a huge conspiracy to keep people ignorant of the truth. I think that the moral damage of participating in that conspiracy is greater than the moral damage of telling people of what they are deprived.

That would be my feeling and the only way I could justify my concealing things from patients individually would be if I, as a professional individual and as a member of a profession, were to go on a public crusade to try to alert citizens to the situation in the health care system. If citizens in a democracy choose, through their voting, to perpetuate the system, then that is their decision, but they should know what they are doing. These are my thoughts on the subject, but since I do not face these issues in person I would not like to stand in judgment over individual colleagues who do. Doctors and other health care practitioners should get together and discuss this issue and see what is appropriate and what is not appropriate for them to do as professional people.

The quality assurance initiative

RB: Perhaps changing the subject a little, we are now embarking, in Britain, on a great deal

of interest in quality assurance. We have committees set up in every district to encourage both hospital doctors and general practitioners to undertake audit, as we are calling it. A lot of activity is now beginning, a fair amount of money is being spent, have you any advice to give us as we start out on this endeavour?

AD: My feeling about audits is that they can work to improve behaviour and bring it more in line with professional standards, and that professional standards, to the extent that they have been validated by science or by experience, will improve the health and welfare of people. So I am in favour of the kinds of activities that you are recommending and describing. We need, however, to make sure that what we do in fact changes practice and that change in practice results in improved health and improved satisfaction of patients.

There is always a danger when activities such as these are undertaken on a large scale, especially when they are sanctioned or expected by professional bodies, government, or other authorities and carried out in obedience to these expectations and demands. The danger is that they are carried out in a kind of routine fashion with no intent of giving them any real effect, without any serious determination to bring about real change. Consequently, we can conform to the forms of the audit and lose sight of its spirit, purpose, and objectives, as a device for bringing about real change, real reform, and real improvement in health and welfare.

It seems to me that professional bodies ought to take this responsibility very seriously, make sure that the activity results in change and not wait for some external body to discover that the activity has been ineffectual, so that something more directive, something more bureaucratic, something more coercive has to be introduced. The only way to forestall the introduction of more coercive methods, methods more akin to policing, is for the professional persons and bodies involved in auditing to demonstrate that, in fact, change is taking place. So part of the audit activity is not simply a reporting of activity but a documentation of real change and a reporting of that change. If we can do that, then we will be allowed to run our own affairs. If we cannot, sooner or later, someone is going to say that this is a lot of activity without evidence of effectiveness; something else has to be done. To me, the lesson that we have learnt from the past 10 or 15 years of developments in the United States is the inability of professionals to put their own house in order, resulting in justification for public authorities to become more intrusive, more directive in their pursuit of quality assurance.

RB: What are our motives that make us, as doctors, interested in quality; maybe we can build on these motives to make quality assurance more effective?

AD: I'll begin with the least important and try to proceed to the more important things. I believe that the interest by external bodies, whether they be governmental agencies or organised purchasers, in quality, and their demand that we do something about it, is motivating to most of us. If nothing else, we are impelled to protect ourselves from the censure and criticism of others. Closer to home, we are motivated by our patients as they become more educated, more interested in and more demanding of quality in some or other of its aspects. We aim to please our patients because we want to keep our patients happy, because we derive some satisfaction from that, it's evidence of our own skill and accomplishments, or because for commercial or financial reasons we want to hold on to our patients – these are incentives that help, encourage, and motivate us to maintain a high standard of quality.

Perhaps even more motivating is the desire to do well in the eyes of our colleagues. We are socialised to valuing the opinions of our colleagues. I think a physician who does not value the opinion of colleagues has not been properly socialised into a professional role. The opinions of colleagues matters more where the work of one colleague is visible to another – for example, in a group practice – or if the success of one colleague in treating patients is dependent on the cooperation of another, or when doctors exchange patients, or share consultations, or one relieves the other in a hospital, so where the work of colleagues is visible to each other and to students. This state of interdependence, which is to some degree functional and to some degree emotional, is a highly motivating force.

Physicians who practise entirely in isolation are much more vulnerable to slipping and not noticing that they have slipped. When they work with colleagues there is always the self correcting influence of direct or indirect comment and influence by one's colleagues, by nurses, and by students if there are students. That's one reason why engaging in education is such an important adjuvant to good quality. But I think most fundamentally striving for quality is rooted in one's training, one's education, the moral principles that guide one as one chooses to become a physician and to pursue a career which is essentially a career of service.

Doing one's best and being self critical, self adjusting, constantly seeking improvement is a fundamental trait of professionalisation; without it one wonders whether any person could be called a true professional. So I believe that the foundations for quality are largely moral in nature, that they have to do with the fundamental nature of what a profession is, with acceptance of responsibility for the welfare of others and the determination to serve, rather than simply to succeed financially or in any other way. That's the reason why I believe that concern for quality is central and has been central in the health care professions. It should make us want to understand quality assurance methods: the ways in which infor-

mation about performance can be obtained and how that information can be used to describe and characterise performance, to localise problems in performance, and lead to improvements in care.

---

*. . . concern for quality is central
. . . in the health care
professions.*

At present, that methodology is not well taught. Medical students, as well as students in any other health care profession, should be exposed to these methods very early in their education, first in theory, then perhaps in controlled simulations comparable to laboratory work, and later in actual practice. This is how we learn physical diagnosis. We learn the theory first, then we examine each other or patients under observation, without direct responsibility for their care, simulating patient care. Finally, we become the actual care givers: we are allowed to examine and act on our findings and treat patients.

I think there should be an analogous progression in learning about quality assurance methods, so that these methods become familiar, they become expected, they become part of professional life – so much so that a physician or nurse would be surprised if he or she were working in a place where quality assurance activities were not present, and would demand them! Just as they should say, “Why are there no clinical pathology conferences?” they would say, “Why is there no quality assurance committee in this place?” “Why aren’t we collecting the kinds of information that tell us how we, as a group, are performing?” I think that is the ultimate, and probably the most efficacious, strategy.

I believe that physicians can be taught something about quality assurance, and participate in it. But currently in practice it always seems to them to be an imposition, an outside intrusion, an additional requirement, rather onerous, perhaps unnecessary, so they would participate in it because it’s expected. I don’t think that’s quite the same as growing up into the profession knowing, expecting, and perhaps ultimately even demanding, that quality assurance be a regular, expected, familiar, inevitable part of professional life.

Striving for perfection

RB: Finally, a personal question; can you cast your mind back to the dedication in *Explorations in Quality Assurance and Monitoring*? This suggested to me that there are personal reasons why quality in health care is important to you and that perhaps we all have our own personal reasons why quality is important. I wonder where your particular passion and interest in quality in health care came from?

AD: If I recall correctly, my dedication to the

first volume of *Explorations* had two parts: one my dedication to my mother and the other a dedication to my father.

The parts that concern my mother had to do with loving and hating, being passionate, feeling strongly, rather than lukewarmly, about things, and being perseverant, obstinate, and determined. These were all qualities that were fairly prominent in my mother’s character and makeup and I think they were transmitted to me. They have very little to do with any particular subject or substantive of content, but they have to do with style, no matter what the subject might be – namely, that one feels strongly about things, that one is not indifferent or half hearted, that one has strong enthusiasms: certain things one likes very much and other things one dislikes very much. It is a tendency probably towards extremes and away from moderation as well as a tendency to be persistent and persevering – not to give up, especially in the face of opposition.

I have learnt these from my mother and perhaps have been, to some degree, immoderate in my espousal of certain things and my rejection of others. I have always felt that a certain amount of passion must permeate even one’s most abstruse intellectual activities. Thought has to be controlled, has to be lucid, and has to be carefully directed; still with it there have to be feelings as well, otherwise it becomes dry and perhaps not sufficiently persuasive.

The dedication to my father is more germane to the substance of my work. It is more germane to my interest in quality because my father was a general practitioner notable for his dedication to his work and his patients. To my knowledge he never refused anything that any patient demanded in effort, no matter how inconvenient. Some nights I have heard him get up to make more than one night visit: he’d come back and scarcely be asleep when reawakened to go out again. Then he would get up early in the morning and go to work. So in terms of the dedication to his work he was, I think, outstanding, never sparing himself. At the same time, in spite of an unbelievable workload, whenever he had a moment after he came home he would sit with some book or journal (often the *Lancet*) to study to learn new things, to order new equipment, and to try things.

He was curious and always willing to improve himself, even though the circumstances under which he worked were totally inconducive to innovation in health care; and probably much of the reading he was doing he could have done equally well financially without. But it was both intellectually and morally rewarding to him to improve himself. So I saw him as the model good practitioner, and I felt that any kind of practice that was less than striving for this kind of perfection was simply unacceptable. I cannot claim that my father attained perfection in his practice, but I can claim that he strove for perfection, and I think it is that striving that stood for me as the model.