BOOK REVIEWS

Australian Medical Education and Workforce into the 21st Century *by Committee of Inquiry into Medical Education and Medical Workforce* (AGPS, Canberra, 1988), pp.xxxix 691, $39.95, ISBN 0 644 08294 1

At a time when we are increasingly aware of the greenhouse effect, and its various causes, it is relevant to observe that publication of books, requiring the use of (non-recycled) paper, involves the destruction of forests. Thus there is a trade-off between publication and ecological responsibility. Book content must be very good to justify the death of trees. This is a **big** book: it is B5 sized, with over 700 pages. In fact, it weighs 1.1 kilograms. In more ways than one, this is not bedtime reading.

In 1987, The Commonwealth Minister for Health announced an Inquiry into Medical Education and the Medical Workforce, with five terms of reference:

1. The effectiveness of the curricula and the structure of the current Australian medical undergraduate education and the internship year;
2. The effectiveness of current postgraduate Australian training for general medical practice and medical specialties;
3. The provision of an appropriate supply of each broad category of medical practitioner.
4. The selection of students to undertake the study of medicine; and
5. The health, social and economic impact of the major recommendations of the inquiry (p.1).

The Committee had seven members: a university Pro Vice-Chancellor (Health Sciences) as chairperson; a Vice-Chancellor; a Professor of Medicine; two people from 'community medicine' (one of whom was an academic); a medical administrator and the Director of the Social Biology Resources Centre in Melbourne. The Committee consisted of two women and five men. Four members had medical qualifications, two had training in the social sciences, and one had a first degree in science and a postgraduate qualification in education.

The Report consists of an executive summary (39 pages), 13 chapters (550 pages) and appendices etc. (138 pages). The last chapter, entitled 'Health, social and economic consequences', addresses the fifth term of reference. Chapter Eleven, 'The Australian medical workforce', is concerned with the supply of medical practitioners, the third term of reference. I think we can conclude that the Committee regarded its strength as being in 'medical education' issues.

The Report starts with a discussion of national health care needs. It begins with the World Health Organisation (WHO) definition of health ("a state of complete physical, mental and socal well-being"), the WHO Alma-Ata declaration that "the main social target of governments should be the attainment by all citizens of the world by the year 2000 of a level of health that will enable them to lead a socially and economically productive life", and statements from the (Australian) Better Health Commission. The Report recognises the "increasing pressure for a reorientation of health services towards a more

preventive and primary care approach, to achieve balance with what was seen as the previous emphasis on the individualised, specialised approach" (p.6). It is said that health improvements "require a community approach as well as an individual approach. While the lead will best come from health professionals and government departments of health, it is apparent that the strategies to achieve better health require active involvement in the total community, including most government departments, the media, the business community and the general population" (p.7). There is little content in this chapter, but I suppose such bland generalisations can be justified in terms of scene setting.

The next chapter, 'Medical education and medical care in Australia', provides some background on medical education, which is largely based on British traditions. Although the informal powers of the General Medical Council (UK) are mentioned in the context of accreditation of medical schools, they are downplayed. A large part of the chapter reproduces extracts from previous reports on medical issues, mainly the 1973 Karmel Report[1], and offers a bland discussion of the Australian health care system. It is useful to note that the Committee makes two recommendations consequent to this discussion:

> The Commonwealth Government recognises the close relationship between, on the one hand, how medical care is delivered and financed, and, on the other, how medical practitioners are trained (medical education) and their numbers and distribution.
>
> In future reviews of Australia's national health insurance system or its schedule of fees, full and careful consideration be given to the consequences, direct or indirect, that changes may have on the quality and accessibility of services and on the distribution and performance of providers. (pp.37-8).

Chapter Four, "Pressures for change", begins with another recommendation — that "non-confidential submissions be indexed and made available to interested parties on request" (p.37).

This Report was, in fact, presented to Neal Blewett, The Commonwealth Minister for Community Services and Health, and John Dawkins, the Commonwealth Minister for Employment, Education and Training. Both of these men are very busy and the first three recommendations of this Committee (quoted above) require them to do nothing. One may wonder if they began to wonder whether the Report was to be taken seriously.

The tone of the Report's content begins to change in Chapter Four. In contrast to the previous chapters, the subject matter of Chapter Four consists of lengthy extracts from submissions received by the Committee. The first part of the chapter begins with extracts from the consumers of medical care, who are, it seems, the ethnic communities, the aged, aboriginals, women, the disabled, homosexuals, and people requiring pain management and palliative care (Section 4.3). (Some readers may be inclined to think of these as some of the more vocal pressure groups of the health sector in current times.) Then we have some extracts from submissions from educators and employers of medical graduates (Section 4.3). Then there are extracts from submissions classified as consumer views of medical practice (Section 4.4). The next section (4.5) consists of more extracts from submissions relating to demographic changes; political, administrative and economic changes; technological change; societal attitudes and expectations; health professions, other than medicine; and patterns of morbidity. There are no other recommendations in this chapter.

Chapter Five, 'The undergraduate medical course', begins with the Flexner concept (1910) of the undifferentiated medical graduate. This large chapter (132

pages) also contains lengthy extracts from submissions to the Committee. There are thirteen recommendations: the Committee is in favour of "innovative programs in medical schools"; "curriculum review"; "exposure to general practice"; "medical counselling and communication"; "skills in and commitment to teaching . . . being given due recognition in the recruitment and promotion of [academic] staff," review of "five and six-year undergraduate programs"; "adequate exposure to . . . medical and public health research", "computer-aided instruction", medical schools adopting "an approach to the conferring of academic titles which will allow a balanced departmental program in teaching, curriculum development and research", and the "allocation of resources for medical school activities being undertaken on a faculty rather than a departmental basis". The Committee is also worried about (low) university salaries in relation to other forms of medical practitioner employment (pp.205-9).

These are local issues within universities, and the recommendations of this Committee will be grist to the mill for certain groups at various levels of university administration, such as the Boards of the Medical Faculties, Academic Boards, Academic Resource and Planning Committees, etc. If the earlier recommendations did not put Neal Blewett and John Dawkins to sleep, this list most certainly would. However, I think that recommendation 5(iv) would awaken them:

> The Commonwealth Government provide grants to match university allocations to ensure that at least $1000 (in 1987 dollars) per student in the final year of the course is available each year for placement and supervision of students in general practice and community health centres. (p.206).

The Committee seems to think that universities make grants to education and is calling on the Commonwealth Government to match university grants! Given that the Commonwealth Parliament in 1986-87 made grants to the States of $2290 million (December 1985 prices) for tertiary education,[2] I would not be surprised if the two Commonwealth ministers, to whom this Report was presented, at this point went to lunch, leaving instructions that this Report be sent to the shredder for re-cycling. Needless to say, the Committee hasn't recommended that Departments of Surgery, Medicine etc., have their budgets cut by University administrators to fund this new priority of general practice.

Chapter Six is concerned with the period after university graduation and before registration by a state medical board, the period of pre-registration or internship. Most of the chapter is, once again, taken up with lengthy extracts from submissions to the Committee, and the Committee makes sixteen recommendations. Some of them are motherhood statements: "It be formally recognised by hospitals, trainees and the State Health Departments that the pre-registration years have both educational and service components and that this be taken into account in determination of future employment conditions" (p.226). We are not told what the Committee thinks should be done: are interns currently being paid too much, or too little? The most significant recommendations are that the pre-registration period be extended to two years and that the structure emphasise general experience (p.226), and that **the Commonwealth Government provide the funds for this extension of internship.** Assuming that 1300 interns (second year) are paid a salary of $25,000, the annual cost (excluding on-costs) of this recommendation is $32.5 million.

Chapter Seven (27 pages) is concerned with clinical settings in which undergraduates and interns learn and are taught. The flavour of this chapter is indicated in the following sentence: "The aim is to produce a medical graduate who will be able to synthesise the various experiences into a mature and balanced participation in whatever area of health care he or she ultimately assumes"(p.260). Chapter Eight is 32 pages in length and addresses vocational training of general practitioners. There are six recommendations, the most important being that "mandatory vocational training and special registration of general practitioners not be introduced at the present time" (p.291). However, in five years the Commonwealth Department of Community Services and Health is to review the issue of mandatory vocational training.

Chapter Nine is 59 pages long and is concerned with training for specialty practice. Although universities offer higher degrees (PhDs and higher doctorates), the practice in the medical profession is that higher qualifications are typically awarded by specialist colleges, of which there are 12 in Australia (with two having major sub-specialties). These are recognised by the Commonwealth and the States via the National Specialist Qualification Advisory Committee. This chapter is largely concerned with internal issues that arise from these structural arrangements. There are 14 recommendations.

The Committee supports the existing system: "It endorses college responsibility for training programs but draws colleges' attention to the need for regular consultation with other parties to postgraduate vocational training" (p.335). So the existing system is acceptable, but it needs some fine tuning (p.334); an awareness of "trends in health policy and in community attitudes" (p.335); selection of trainees which does "not discriminate against any group and should meet equal employment opportunity guidelines" (p.337); that "the key role of teaching hospitals in specialist training be recognised and allowed for in staffing" (p.338); that consultation between the colleges and universities should take place to accept appropriate university post-graduate degrees as **part** of college requirements (p.339); that universities, in allocating university funds between faculties and departments, should take into account "the voluntary contribution of university clinical academics...towards postgraduate specialty training" (p.339) (even though the trainees are not university students!).

The next chapter (24 pages) deals with continuing education, which the Committee regards as a good thing. Thus the main recommendation is that "as a condition of continuing registration by State medical boards, medical practitioners be required to demonstrate that they **belong** to an accredited group which has a major responsibility for continuing medical education" (p.363). They do not have to go to any courses, read anything; they just have to belong.

Chapter Eleven (108 pages) is entitled 'The Australian medical workforce', and presents 34 recommendations, the first of which is that an ongoing Medical Workforce Review Committee be established (p.451). This recommendation followed from the Committee's review of the available workforce data sources — the Australian census; the Commonwealth's Central Register of Medical Practitioners (CROMP); Permail Pty Ltd (a commercial firm that compiles, and sells, names and addresses of medical practitioners); Medicare and registers of (State) medical boards. Other recommendations also relate to data collection — standardisation of medical classifications by the organisations that compile data (p.453); refinement of CROMP (p.454); and State medical boards to make completion of a workforce questionnaire a pre-condition of re-registration (p.454).

After considering various workforce data, the Committee, generally, reaches a 'steady as she goes' position with respect to the medical workforce: the current graduations will be "appropriate" into the 1990s (p.464). However, a comprehensive review should be undertaken within five years "to ensure that medical school graduations remain appropriate to the overall medical workforce". Australia has a relatively large medical workforce compared with other countries. Table 11.4 (p.372) reproduces data on medical practitioner/population ratios in various countries.

The Committee also discussed geographical and specialty dimensions of the medical workforce. At one point, the following sentence appears: "Permail data on the number of specialists are not available" (p.372). This sentence is, to put it simply, false. Any reader familiar with medical workforce data knows that Permail **does** have a specialty classification system, though it does not correspond exactly to other classification systems used by other data collection agencies. And in fact the consistency of classification systems is the subject matter of recommendation 11 (iii) (p.453). How has the Committee made this mistake? Table 11.5, which presents data on medical practitioners by specialty and by State/Territory from various sources, has only gaps for specialists in the Permail column. The source of the Permail data for Table 11.5 is given as "Submission by [Royal Australian College of General Practioners]". Yet on the very next page, Table 11.7 presents data on specialists for New South Wales using Permail data! The source for Table 11.7 is "Permail data from submission by NSW Department of Health".

This indicates how the Committee has approached its task. It has sifted material from the 402 (!)submissions received (listed on pp.561-9) and has used these to produce its mega Report. There is little evidence that the Committee had any guiding framework in approaching its terms of reference, and, by default, what the numerous submissions said became input for the Committee. There is a notable exception to this comment: Neville Hicks, a social scientist at the University of Adelaide and a member of the Committee, has an historical perspective on medicine, though his perspective, supplemented by recent demographic trends, has been confined to Appendix Seven (pp.592-8).

This segment of the Report indicates not only that the Committee has relied on submissions for data, but that it has not seen its function as being to undertake **analysis** of its own: the Committee has accepted others' analyses. In the context of the medical workforce, this led to some bizarre results: Table 11.7 is said to indicate the number of "active" medical practitioners and ignores the assumptions of the Permail data used; no indication is provided of the source of population data used in calculations of ratios of medical practitioners and population, and there is no reason to believe that any ratios in the Report are comparable. And so one could go on.

Given that the Report is light on analysis, does it excel in something else? I think the answer is yes: it is heavy on opinion. This comes out in later parts of Chapter Eleven: "that all existing medical schools be retained" (p.465), despite the absence of any analysis; that ". . . there is not an overall oversupply currently in the specialist medical workforce" (p.456) nor in general practice (p.457); that medical schools have an entry quota of at least 50, and that the Commonwealth Government provide additional funds to the University of Tasmania to increase its classes by ten to achieve this "critical mass" of 50 (p.468). A restrictive policy on medical migration is thought appropriate: "the medical needs of the

Australian population generally can be best met by locally trained graduates familiar with Australia's culture, health care system and style of medical practice" (p.476). The ethnic communities need not worry as "these graduates should, and do, include students from non-English speaking backgrounds and other cultures" (p.479). In fact, nineteen of the Chapter's 34 recommendations relate to the medical migration issue, including two that relate to overseas undergraduate students studying medicine (pp.483-4). Consistent with its restrictive approach, the Committee points to the need for such persons to have student visas, not join the Australian medical workforce, only work in hospitals, and undertake internships in their countries of origin. Needless to say, there is considerable opinion on the rural/remote area issue of medical practice (pp.493-98). This discussion produced another motherhood recommendation: "medical schools, specialist medical colleges, teaching and other hospitals, departments of health, community health facilities, the Health Insurance Commission, the Australian Medical Association and other bodies recognise the importance of an equitable geographic distribution of the Australian medical workforce and the existence of current geographic imbalance..." (p.497).

Chapter Twelve is entitled "Selection of students for medical schools', and is a response to the fourth term of reference, which required the Committee to recommend "ways in which entry to medical education may be made available to the widest socio-economic range of students" (p.1). There are nine recommendations. There is nothing surprising here: "Medical schools pursue more actively ways of working through the secondary schools to make students from **government** schools aware of the opportunities to study medicine . . ." (p.543); "Universities monitor the socio-economic and ethnic mix of entry . . ." (p.543); "Medical schools be encouraged to investigate and evaluate alternative means of selection . . ." (p.544). And so on. The Committee describes all this as urging "medical schools to take a more experimental and innovatory approach" (p.546).

Chapter Thirteen, 'Health, social and economic consequences', eight pages in length, is the Committee's response to the fifth term of reference. Two of these eight pages are taken up with the Committee's 'Summary of recommendations according to responsible institutions' (pp.551-2). There are eight such organisations to which the Committee directs its "almost one hundred recommendations, as well as many suggestions" (p.546); the Commonwealth Government, State Governments, medical schools, the Australian Medical Council, the National Specialist Qualification Advisory Committee, the Australian Postgraduate Federation in Medicine and other postgraduate committees, and the Australian Medical Association.

The Committee recognised that the fiscal environment was not propitious for calls for more Commonwealth spending on education but "moves, deliberately, against this tide" (p.546), and justifies its call in terms such as "Health.. is central to national well-being, activity, creativity, performance and prosperity...A high level of training is needed to produce medical graduates able to make appropriate use of accumulated knowledge and of the variety of powerful diagnostic, therapeutic, and preventive measures already available...Research in medical science could lead to progress in science and technology which might serve as an important base for productive industries" (p.546).

The Committee thought that the recommendation to have more training in general practice would cost $600,000 per year, and that $100,000 would initiate "innovation in curriculum development and in selection of medical students" (p.549). The really expensive recommendations such as the extension of the preregistration period to two years, the Committee found "difficult to calculate" (p.550). Even though the committee did not know the benefits and costs of these recommendations, it was prepared to make an act of faith: the value of the changes would exceed the costs. "[The Committee] believes that the changes it suggests will have positive results, in quality of service and training in the teaching hospitals and in the national medical care system, which will justify these costs" (p.550). I would be surprised if the two Commonwealth ministers felt that this assertion of belief would be of much assistance to them in Cabinet during budget sessions.

What purposes has this report served? Well, the Committee 'workshopped' on continuing medical education at Westmead Hospital (Sydney) for two days (pp.573-7) and on clinical settings for two days at the University of Melbourne (pp.578-83). In addition, the Committee held consultations "with many organisations and individuals" (p.4) in all capital cities, Newcastle and Townsville. Also, the Committee and/or secretariat members attended "workshops and conferences, organised by other bodies" (p.4). In addition, the Committee "made special arrangements to meet with a large number of consumer groups. Combined group meetings were held in the evening in all State capitals except Hobart . . ." (p.4). There were nine organisations at the Brisbane meeting, including Children by Choice, Consumers' Health Forum Inc., and Queensland Women's Health Network. In writing the report, the Committee has probably gone close to quoting nearly everyone who made a submission, and it is this which explains in large part, the Report's length.

There are medical academics who will be able, or at least could try, to use some of the outputs of this Report within the context of university politics and/or administration to obtain more resources for their medical schools. Whether they will be successful may depend, in part, on how many non-medical academics read this Report. Other groups that may find the Report's outputs useful for their purposes are those medical groups that have received the Committee's seal of approval. Non-recipients of the Committee's approbation will be less pleased, but even the unsuccessful have received some brownie points, somewhere, in this huge report. What of the two Commonwealth Ministers to whom this Report was presented? I suppose the Report's existence may enable them to deflect claims/demands from special interest groups in the health sector for some years to come. But what of the policy advice?

The medical profession, with typically six years' successful university study, at least one year's apprenticeship prior to registration by a medical board established by Australian State parliaments, operates in a highly regulated environment. These severe barriers to entry into the medical labour market were first analysed by Friedman and Kuznets,[3] and the form of regulation is the most severe of the various occupational regulatory devices.[4] In recent years there has been significant deregulation of capital markets in Australia, reductions of protective devices against international trade have taken place, deregulation of the airline industry has been announced, and the Commonwealth Government has moved to reform labour practices in shipping and stevedoring. Furthermore, the Commonwealth and the Australian Council of Trade Unions have been

working to improve the operations of labour markets via award restructuring before the (now) Commonwealth Industrial Relations Commission. This (insider) Report has not even alluded to any of these pro-competitive initiatives elsewhere in the economy, let alone developed any arguments as to why deregulation is not appropriate for the medical labour market. In fact, the Committee can note, **without comment**, that the Colleges have reduced entry to specialties, motivated by the self-interest of those who have already entered (p.311). Later, the Committee justifies this on the grounds that College "members are expert in assessing standards of practice" (p.502).

On the size of the medical workforce, The Commonwealth ministers would be well advised to ignore this Report and call for the joint submission from the Department of Health and the Australian Institute of Health. (I suspect that this is contained in Submission 400, listed on p.563, from the Commonwealth Department of Community Services and Health.) While studying Chapter Eleven, I felt a desire to read this submission, as it seemed to me that the authors were not engaged in special pleading of some kind. Furthermore, from the extracts reproduced in the Report, it seemed to me to contain some analysis, something to which this Committee, on the basis of its Report, is averse. In making this comment, I have in mind the nonsensical discussion of supplier-induced demand and the discussion of over-supply of medical practitioners (pp.455-61). Some of us would have been well served if this joint submission had been reproduced as an Appendix, rather than the statements of the Royal Australian College of Obstetricians and Gynaecologists entitled 'Policy on continuing certification' (Appendix 13), and 'Australian Bicentennial health initiative' (Appendix 12).

To return to the trade-off issue referred to at the beginning of this review, in terms of policy content the trees that perished so that this Report could be published, died in vain.

REFERENCES

1. Committee on Medical Schools, *Expansion of Medical Education,* AGPS, Canberra, 1973.
2. Commonwealth Treasury, *Payments to or for the States, the Northern Territory and Local Government Authorities 1986-87,* AGPS, Canberra, 1986, p.51.
3. M. Friedman and S. Kuznets, *Income from Independent Professional Practice,* National Bureau of Economic Research, New York, 1954.
4. M. Friedman, *Capitalism and Freedom,* University of Chicago Press, Chicago, 1962.

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Copyright Protection of Computer Programs *by Beth Gaze*
(Federation Press, New South Wales, 1989), $50.00, ISBN 86287 015 2

Beth Gaze declares her objective to be "the presentation of an accessible account of the development of computer copyright law in USA and Australia, as a basis for understanding the present situation and future developments". In this