

Career Opportunities for Medical Specialisation in the 21st Century

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Introduction

Human resource planning for doctors is a complex and dynamic process. Many factors will influence how the career opportunities for medical specialisation will unfold in the 21st century. It will not be my intention in this presentation to attempt to predict in definite numerical terms what these opportunities will be. To do so would be to over-simplify the process of planning at the risk of being inaccurate and misleading. Instead, I would like to invite you to consider some of the influences that will be brought to bear on how these opportunities will develop in the years ahead.

Let me pose three questions that will help to surface the influences we will need to consider in our planning for medical specialists in the 21st century:

- a) How many can we accommodate?
- b) How many will we need?
- c) How many can we produce?

How many can we accommodate?

This question addresses the capacity of the country to sustain and support medical specialists. This capacity can be policy-based, population-based or public sector-based. In Singapore, there is a policy-based influence on the capacity for medical specialisation. The White Paper on "Affordable Health Care" published in 1993 has imposed a limit of 40% on the percentage of medical specialists in the doctor population. Overall, this means that opportunities for medical specialisation will have to be limited. The Ministry administers a medical traineeship programme that controls the number of training positions provided each year for each area of specialty. This programme also moderates the spread of talent amongst the various specialty areas.

Capacity can also be influenced or determined by specialist to population ratios. These ratios allow for inter-country comparisons to be made. However, it is not easy to make a judgement based on such comparisons as there are problems of inter-country comparability and transferability due to differences in healthcare structures, financing and practices. An additional factor that will have a growing influence in Singapore is the

regionalisation of medical services. Regional growth will effectively increase the population base covered by our healthcare system and will consequently increase our capacity for specialists. However, this trend will have to be monitored closely as the increase in capacity is unlikely to be across the board but will only be for those specialties that succeed in penetrating the external market.

In determining capacity, the requirements of our public sector hospitals must also be considered. The public sector in Singapore provides 80% of hospital care and all postgraduate specialist training. We need therefore to ensure that there is sufficient through-put to staff the public sector and enable it to perform its roles effectively. How services developed and are delivered in our public sector hospitals will therefore have an influence on the opportunities for specialisation.

How many will we need?

This question changes the perspective from one of capacity to demand-demand based on the needs of patients and the professional practices appropriate to these needs. The number and type of specialists and subspecialists that are planned should be responsive to changes in disease patterns and practice patterns. The numbers and types of surgeons that we plan to have should be influenced by the surgical conditions of patients and the surgical practices required to treat these conditions. New and more efficient treatment modalities and protocols e.g. an increase in ambulatory care, minimally invasive surgery and laser surgery will influence how care is delivered and affect the size and composition of the surgical workforce required.

Changes in professional practice also affect how specialisation develops. With expansion of knowledge and advances in skills, techniques and technology, many new subspecialty areas of practice have developed. This trend towards subspecialisation will change the scope of opportunities available. However, we need to guard against this trend leading to over-specialisation. Already, in the field of surgery, subspecialty surgical practice has increased at the expense of general surgical practice. The same is true of

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internal medicine and the medical subspecialties. Not all patients' needs will require the care of a subspecialist. It is therefore necessary that a healthy balance is maintained between the development of the general specialist and the subspecialist.

How many can we provide?

This question moves the perspective from one of demand to supply, or potential supply. The number of specialists that can ultimately be provided will depend on the number and quality of trainees that the specialty is able to attract. For most specialties, over the past few years there has consistently been a larger number of applicants for traineeship than positions available. For surgery, there has usually been at least twice the number of applicants than positions.

While there is no shortage of entrants into training, supply is only achieved if there is a consistent throughput of good quality candidates from the training pro-

gramme. Both the quality of trainees and the quality of training will influence the quality of specialist that is ultimately produced. A good training programme will in itself attract good quality trainees. We need therefore to invest sufficient time and effort in our specialist training programmes so that the next generation of specialists will be able to maintain and surpass the standards of the present generation.

Conclusion

The career opportunities for medical specialisation will be influenced by capacity, demand and supply. Planning will have to be dynamic and an on-going process. How professional practice develops and professional care is delivered will undoubtedly influence the human resource plans that are formulated. Ultimately, these plans must be able to respond to the healthcare needs of the population effectively and efficiently.