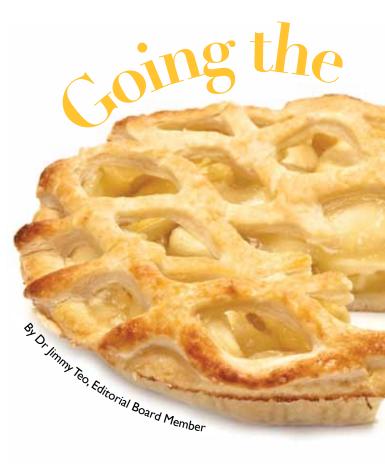
## How much should Singapore spend on "healthcare"?

I cannot agree more with many of the points made by the Hobbit in her column this month (see page 24). However, there seems to be much consternation among many doctors who have lived through the old order. Let me offer my view on US-style medical residency programmes. Firstly, I completely agree that the practice of Medicine is contextual. The Republic of Singapore is the world's most affluent country according to the gross domestic product (GDP) per capita in the year 2010. Therefore, it is immediately evident that Singaporean doctors should practice first world, first class Medicine that first world incomes can afford. It is unusual that we do not regulate Singaporean citizens on the purchase of the latest and greatest smartphones (first world), but our health policies and regulatory activities attempt to "control healthcare costs" by "dumbing down" healthcare services, goods, and expertise. Of course, this is a much more complex discussion that is related to residency training programmes (postgraduate medical education) but difficult to discuss within the word limit confines of this article.

# Postgraduate medical education and training – why?

The most important outcome of postgraduate medical training is the type of doctor you would want to treat you. The recipients of care from the doctors in training today will be you. Therefore, Singaporeans who are now in their 50s and 60s will be the prime beneficiaries of our triumphs and/or failures in revamping the methods and curriculum for doctors in training today. It takes five years to eight years of medical school training (base clinicians to cross-disciplinary clinician-scientist, -administrator, -philosopher, etc), and about another three to ten years of postgraduate clinical training to get a fully trained doctor. So the Singaporeans of today, discerning consumers of the latest and greatest products, have to honestly ask themselves, "What type of medical services and products do we wish to avail ourselves when we become patients?"

With the revolution in biomedical science and technology, we have witnessed an exponential increase in medical science and knowledge. It is not possible to keep broadly in step with the latest advances in many fields. Not too long ago, postgraduate medical training was more apprenticeship, with less prescribed objectives and "funds of knowledge". The rapid introduction of new classes of medications, medical devices and procedures, coupled with increasingly complex patients (elderly living longer with multiple comorbid conditions associated with lifestyle-related, noncommunicable diseases), will make it inordinately expensive and longer to train physicians in the "traditional" way. Therefore, to reduce "waste" and increase "productivity", the training needs to be improved and the time taken for trainees to become "certified" doctors should be purposefully driven. The institution of residency programmes, if executed



properly, will increase the accessibility of Singaporeans to highly trained and informed doctors who are able to provide medical care that should be available in a sophisticated post-industrial nation in the first league among nations.

### **Learning from the past**

Before we can introduce and talk about the new, let us start off with what was wrong with our previous training structure. For the longest time, trainee doctors were to complete key rotations listed as the requirements of specialty training. However, this was muddled by clinical service needs in the institutions and trainees might be "hijacked" into non-training rotations. Moreover, oversight, training objectives, and formative and summative assessments were at best rudimentary (compared to current and future set-ups), potentially very subjective, inconsistent amongst training institutions, and not clearly benchmarked by common assessments.

Meanwhile, non-trainee junior doctors got second choice postings, often in positions of very little formal medical training (prison service, police academy, third time posting in Neonatology, standing around during exercise electrocardiograms for six months, etc). Many of these positions were of low productivity (not accounting the waste to society of using very expensive medical graduates who are provided at little cost to institutions) doing jobs in redundant capacities. A check of our medical register would show our past failures: the number of certified primary care providers is low, and the constant concern that private GPs may lack adequate training and experience to assume some of the care from hospital-based specialty



services. The residency programmes have already started restructuring work processes and systems in hospitals, and will consequently increase productivity and reduce costs (development of physician-extenders such as phlebotomists, case managers, nurse clinicians, etc). In management speak, expensive personnel should only be deployed to do the job that others cannot do, and for doctors, this would usually be diagnostics and management of the undifferentiated patient or directorship of disease management programmes.

Medical training was overseen by many people wearing many hats with great conflicts of interest. The medical service regulator, financier, provider and trainer were cuts of the same cloth. That situation was untenable. It was akin to financial regulators sitting on the boards of investment banks and operating the trading desks. Therefore, it is clear we need to invest in the training of doctors, separate the various roles and fully fund all the positions. To an outsider looking in, the system will be well regulated to the highest standards, independent and professional, inspiring great confidence, and attracting the highest premiums. The residency programmes thus allow us to make a clean break with the bad habits of the past and set us on a way to the future. Trainee doctors are first of all trainees, presumably inadequate in many aspects of skills and knowledge, and therefore, have to be systematically supervised to assume the job that they will eventually do. Residency programmes aim to model physician behaviours conducive for lifelong learning and practice. Creating the proper systems and funding it appropriately, institutions are compelled to separate the two objectives of education and service. Additionally, residency programmes will also be a driver for the overhaul of processes and systems to increase productivity, expertise, capability, capacity and accessibility. All patients in Singapore should have access to a fully trained doctor in the first instance, whether full-fee paying or subsidised by the public.

## Training a Singaporean doctor

Singaporean doctors are Singaporeans first. They live in one of the richest countries in the world. They aspire to high levels of medical education and supreme performance in clinical practice. Every year our medical schools take in some of the best and brightest young Singaporeans. When they graduate, they aspire to advance medical training and be able to practice, research and innovate. Our hospitals should be number I, just like our airport, airline, banks, or any other Singaporean entities, and our doctors should proudly associate with them.

The residency programmes will enhance postgraduate medical education here as the best practices of the best institutions in the US are implemented. All US residency programmes are accredited by the Accreditation Council for Graduate Medical Education (http://www.acgme.org), and basic requirements, philosophy, and structure are common to all training institutions. Clearly, the many institutions available also mean highly variable standards and quality. As a guide, the primary programmes offered by a university affiliated to a major medical centre are usually the better programmes. Other good programmes are major non-profit foundation medical centres with a clear and long tradition of postgraduate medical education as one of their mission objectives.

The common factors in good programmes are a clear mission objective, adequate staffing for education (universityfunded staff are primarily for education and not clinical service), and less concern about clinical service revenue generation (non-profit foundations and few uninsured patients - patients are self-selecting). These institutions are the bedrock of medical education, clinical research and care innovation; they train and expose the best and brightest American doctors to full-spectrum super subspecialties unavailable anywhere else in the world. Community general hospitals also provide postgraduate medical education in more "routine" and "general" specialties. They provide good postgraduate medical education and deliver the primary care providers in many towns and cities (paediatricians, family practitioners, internists and gynaecologists). The adoption of US-style residencies will allow the natural differentiation of our training institutions and increase accessibility of Singaporean doctors to better and more varied training. Our trainees will compete or converge on the programmes that best meet their aspirations and personal characteristics, all right here in Singapore.

#### **Health and human social services**

Often, people confuse healthcare, medical care, and

care in general. Singapore has excellent healthcare - the low-lying fruits have been plucked. We have clean water, excellent sanitation, proper housing, childhood vaccination programmes and basic health screenings at the primary care level (school health services and national service health screenings). We have excellent medical care for disease management, as exemplified by the "high" prices that foreigners pay to consult professional doctors and avail themselves of ethical medical treatment in the free market of Singaporean private hospitals and clinics. This is a source of constant debate and discomfort amongst Singaporeans. Public and private expenditure policies, tax rates, allocation of tax revenue, and the quanta of personal and public apportioning of financial resources would therefore set limits on the types of medical care services, and their availability and accessibility.

Many of us in institutional practice in Singapore would be accustomed to varying degrees of "rationing" by wait time, or by the restricting or non-availability of some of the latest medical services and products, basic healthcare, and general care. Often, this is because it is difficult for care advocates, policymakers, and regulators to decide what is basic and what is not. Nonetheless, many doctors in practice today will recognise that we do not practice first class healthcare (Just ask yourself how many of your adult patients who should receive influenza and pneumococcal vaccinations did?), nor do we provide first class medical care (How many of your patients did not attain targets of treatment because the standard drug list does not include the newer, more potent, patented, unsubsidised medication?), and care in general is less than ideal (How many patients remain in expensive but subsidised, acute hospitals awaiting discharge solutions because their children live overseas as part of the Singaporean economic imperative, or the child is the sole breadwinner?).

The doctors, who can accept varying levels of resource limitations, will gravitate to the various government associated hospitals; and others, who feel otherwise, will enter private practice or leave for practice in other first world countries. The total expenditure on health and human services, including other ministry budgets (childcare, community services, etc), are interrelated and reflects the needs of Singaporeans. Our policy makers and regulators are not keen to monetise many of these activities but yet, they clearly carry an economic cost directly to the individual, or collectively as a country.

Yes, we will expend more of our income on health and human social services with US-style residency programmes not because the "costs" have increased, but to train the doctors of tomorrow today. To do this, we have to treat the patients of today with a considerably higher standard of medical services and products, healthcare services, and provide more options of care in general. This then leads us into the battle for the "discretionary" income that individuals and businesses seek. If government savings and taxation policies are geared towards providing low standards of care and human social services, then current income is "not spoken for" and becomes "discretionary", much to the delight

of businesses and taxpayers. However, this is short-sighted — we all know that in care and human social services, we will all end up paying for it one way or another. It is far better to allow monetisation of many aspects of care services and "fully account" for them via greater apportioning through enforced savings and taxes, to reduce future social problems and create stable communities with full-spectrum care services available on an individual level. In the long run, it will reduce individual and family stress, enhance care in general, and help fulfil our pursuit of happiness that we pledge ourselves to one another.

A corollary to this: if everyone's money is already spoken for health and social services, the cost of living (housing, cars, etc) will drop as liquidity is sucked out from the monetary system. There is no magic number when it comes to the proportion of a country's GDP to be dedicated to care and human services. It is a matter of Singaporean society's priorities and resource allocation choices. More people will be employed in care services, and the proportionate share of all other industries in Singapore will correspondingly fall as labour and monetised activities increase in care and human services. Individually, Singaporeans will be winners overall as we privatise health gains and socialise monetary losses — the only "industrial" sector where it is ethically and morally justified to do so.

#### **Singaporean patients**

The ideological war on whose responsibility, the base level of care services and types of products, and the price to pay (both individually and nationally) has come to our shores. USstyle medical residency training increases base accessibility of all Singaporeans to first class medical care. But this is a free market, the institutions will naturally differentiate and offer different levels of care services. While base accessibility (ie, available in Singapore instead of needing to fly to the US) is assured, but like Singapore Airlines, we cannot give discounts in first class. It is more important going forward to be open and transparent about clear differences in availability of services. It would be disingenuous to suggest that Singaporean doctors trained in a US-style residency will, by itself, result in higher "healthcare" costs. Singaporean patients have to decide for themselves. If they believe that they are participants in a complex, sophisticated and industrialised society, which is able to offer many therapeutic solutions and care options, then they have to allocate sufficient resources. If however, they opt for conservative, limited interventions and care options when afflicted with complex medical illnesses, then they really do not need Singaporean doctors. In either case, the adoption of US-style medical residency programmes puts Singaporeans first, whether the Singaporean in question is a doctor or a patient. SMA



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