

A complementary model for medical subspecialty training in South Africa

The shortage of healthcare workers and doctors in the developing world compared with the developed world is problematic, and will continue to be so, owing to the ongoing migration of qualified professionals and the inability of the state to remedy the shortfalls.^[1-2] This will seriously hamper the government's National Health Insurance (NHI) plan and the sustainability of South Africa (SA)'s healthcare sector. Furthermore, it is well known that the duration of medical training in SA is exceptionally long, which discourages trainees.^[3-6] Medical corporates have taken a limited initiative to fund education projects in collaboration with academic institutions. These projects have been unstructured, mostly ad hoc, and poorly co-ordinated. The private corporate medical sector has expressed a desire to become involved on a much larger scale by means of more formalised structures.^[4] Given this background, the primary objective of our research was to develop a business model to complement the current academic medical subspecialty training.

A pilot model for training subspecialists in reproductive medicine was developed as a first attempt to address the threatening shortage of subspecialists and the long duration of training. The programme was successful at all levels, from training subspecialists/fellows in reproductive medicine, embryology laboratory scientists, and three PhD candidates in the subspecialty. With this in mind, a research proposal was developed to scientifically confirm the viability of implementing the programme on a larger scale. A two-phased research process was used to collect the data. In phase 1, data were collected from stakeholder groups. The results of this phase assisted in generating variables to include in the measuring instrument used for the survey conducted in phase 2. In this latter phase, the perceptions and expectations of subspecialists with regard to subspecialty training were obtained.

The results of the demographic variables confirm the ageing profile of subspecialists, particularly in reproductive medicine, and the dire need to ensure succession. The findings show that the expectations of reproductive specialists and cardiologists with regard to the training of subspecialists are very similar, except for their views on the duration of training. The reproductive subspecialist respondents were more in agreement than the cardiology respondents that the duration of training is too long. The greatest gap between perceptions and expectations was observed in the training factor.

Based on these findings, a business model for the training of reproductive subspecialists was proposed. This model requires that role-players and stakeholders effect changes to accommodate larger-scale potential public-private partnerships (PPPs). The model could also be applied to other disciplines and where the need exists to complement other subspecialist education. The model envisages that all stakeholders in the training of subspecialists need to make a paradigm shift to facilitate changes to accommodate the complementary system, which will benefit both the private and the public sectors. The role-players, from the regulators to the Department of Health, via the Health Professions Council of South Africa (HPCSA), will need to undergo a change in their way of thinking, i.e. they do not need to be the sole decision-makers with regard to training numbers required for subspecialisation and they need to participate in the development of PPPs by collaborating with the subspecialist societies that are the closest to their members and their needs. They should play a more active role in the future of their members in much the same way that the HPCSA plays a role in decision-making with

regard to training numbers and institutional allocation. Furthermore, the subspecialist societies play an integral role in accreditation of distant learning sites with academic institutions. Private corporate funding for subspecialty training may be channelled directly to the Colleges of Medicine of South Africa (CMSA) or an independent administrative entity. This will avoid the intermediate step where social and corporate foundations make decisions on how funding is distributed. The CMSA or an administrative entity will ensure equitable decision-making and good governance in the distribution of funding, together with its academic responsibility, as laid down in its constitution. Academic institutions, where necessary, can make the required curriculum and logistic changes to enable training at a distant site. In an extended programme, negotiated agreements will be required to accommodate the development of PPPs, as the model does not foresee any input from the national fiscus. The private sector accepts that they are the greatest beneficiaries of the state-funded medical education system, and that they have a responsibility, in principle, to contribute to and participate in PPP medical training. The model will make an ideal point of departure towards such a joint venture. The academic institutions and CMSA should maintain their historical role of overseeing medical education, and assume an administrative financial role.

The advantages of such a model are that it will provide for a complementary method of financing subspecialist training. It will address the declining numbers in both the private and public sectors. It will also ensure redistribution of subspecialists to smaller centres. Moreover, the model will allow a subspecialist to train in the subspecialty of their choice, in an area of their traditional practice, while earning a suitable income.

The model has an innovative long-term financially sustainable funding initiative from a wide spectrum of corporate stakeholders and the private sector. It will allow much greater exposure to clinical practice, where currently there is disparity between the public and private sectors regarding pathology profiles and management protocols. The model will also bring tertiary professional medical education in line with the training of other professions, such as law and accounting. Lawyers and accountants are currently trained in the private sector, following completion of a basic degree, while medical training is done solely in the public sector. Academic institutions will continue to fulfil the role of educator, as they will provide, either distance, block-release or online training to subspecialists in collaboration with decentralised centres. The model also provides important guidelines on how to arrange a PPP or alternative special purpose vehicle. This model, on its own, may be an ideal model and provide an incentive for the developing NHI.

The model is currently needed more than ever before, as we are now experiencing an enormous public outcry against tuition fees in tertiary educational institutions. With this model, we foresee that subspecialist education, the highest tier in medical education worldwide, can to a large extent be removed from the national medical budget and be absorbed by the private sector, which, as we know, is willing to do so. The model can also be applied to all subspecialties, and it is expected that both the public and private sectors will be able to benefit from it at the same time. The intention is to implement the model as a complementary system to the current public training system, and to thereby maintain numbers in both the public and private sectors.

This editorial is partly based on a PhD thesis in Business Management, Nelson Mandela Metropolitan University, Port Elizabeth, SA.^[5]

J Paul F Dalmeyer, Mimi Struwig

Department of Business Management, Faculty of Business and Economic Sciences, Nelson Mandela Metropolitan University, Port Elizabeth, South Africa

Thinus F Kruger

Department of Obstetrics and Gynaecology, Faculty of Medicine and Health Sciences, Stellenbosch University, Cape Town, South Africa

Corresponding author: J P F Dalmeyer (paul@dalmeyer.co.za)

1. Benatar SR. Health care reform in the new South Africa. *N Engl J Med* 1997;35(1):81-85. DOI:10.1056/NEJM199703203361224
2. Naicker S, Plange-Ruhle J, Tutt RC, Eastwood JB. Shortage of healthcare workers in developing countries – Africa. *Ethn Dis* 2009;19(1 Suppl 1):60-64.
3. Freed GL, Dunham KM, Switalski KE, Jones MD jun., McGuinness GA. Pediatric fellows: Perspectives on training and future scope of practice. *Pediatrics* 2009;123(Suppl 1):31-37. DOI:10.1542/peds.2008-1578I
4. Life Healthcare. Training and development – Life College of Learning. 2012. <http://www.lifehealthcare.co.za> (accessed 22 March 2016).
5. Dalmeyer JPF. A business model for medical subspecialty training in South Africa. PhD thesis. Port Elizabeth: Nelson Mandela Metropolitan University, 2015.
6. Van Niekerk JP. In favour of shorter medical training. *S Afr Med J* 2009;99(2):69.

S Afr Med J 2016;106(5):438-439. DOI:10.7196/SAMJ.2016.v106i5.10336