

**PRIVATE PUBLIC PARTNERSHIPS TO TRAIN SUBSPECIALISTS IN SOUTH AFRICA**

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**ABSTRACT**

In this article, a meta-analytical literature review was used to formulate and explain how to implement Public Private Partnerships (PPPs) in the training of medical subspecialists in South Africa. In-depth interviews with relevant role-players in medical subspecialists training were also conducted to clarify the training process and their roles. A framework to implement PPPs in medical subspecialty training was suggested. Two specific areas where PPPs would play an important role were the delivery of academic training programmes and the financing of the academic programmes.

**Keywords:** Public private partnerships, medical subspecialist training, role players in training

**INTRODUCTION**

The introduction of private public partnerships (PPPs) in South Africa has been one of the more important healthcare reforms in accelerating the efficient delivery of health-care services at costs that are affordable (Shuping & Kabana 2007:157). The need for PPPs in medical subspecialty training arose as a result of the inability of the public sector to provide the required number of medical subspecialists. Naicker, Plange-Ruhle, Tuttand Eastwood (2009) argue that the shortage of healthcare workers and doctors in the developing world compared to the developed world is a problem, and will continue to be so, owing to the continued migration of qualified professionals. For example, Africa has 2.4 physicians per 10,000 population, compared to the Americas, which have 20.0 physicians per 10,000 population (World Health Statistics 2016). Can PPPs in subspecialty training assist in delivering the training needed to increase the number of subspecialists?

This paper proposes a way to facilitate the required private public arrangements to ensure the training of adequate numbers and ensure that the quality of medical subspecialists in South Africa is excellent. The development of global research on subspecialty training as well as South

African research on the topic needs to be analysed critically to determine the research's problem formulation. Thereafter, the empirical survey is outlined and recommendations made.

### **GLOBAL RESEARCH ON SUBSPECIALTY TRAINING**

From the global literature (Bhattacharya 2010; Benatar 2004) on the subject of subspecialty training, most countries have had to contend with the problem of capacity, duration of training and the development of curricula for higher learning. Solutions proposed and/or implemented to resolve the problem have differed from country to country, and from institution to institution. Table 1 outlines how subspecialty training has developed over the years in the global arena.

**Table 1: Development over time of global research in subspecialty training**

<b>Author</b>	<b>Brief synopsis of research</b>
Walden University (1970)	Implemented the first model of decentralised education. Institutions are often sustained by venture capital, are profit-driven to maintain financial viability and they actively market distance learning. These models are extremely attractive to adult students, who constitute the majority of the trainees.
Earley (1992)	Emphasised the need to have different curricula for the general internist and the medical subspecialist. It is proposed that the duration of training be rationalised, to service the needs of both the internist and the subspecialist.
Connelly, Knight, Cunningham, Duggan and McClenahan (1999)	Indicated key training issues for a collaborative, decentralised and quality approach to multidisciplinary education and training. Proposed a review of primary healthcare that led to the establishment of a Multidisciplinary Public Health Forum (MPHF), to rethink the education and training requirements, to realise a new public health agenda.
Kennedy Report (2001)	Indicated that the medical profession needed to take charge of training competence in their specialties, and that it was the responsibility of each specialty to define the required level of performance, so as to rationalise training time and curriculum standards to be achieved by trainees.
Duke and	Noted the fact that training in all medical disciplines needed to be reviewed. Proposals to reduce training time for higher specialist

<b>Author</b>	<b>Brief synopsis of research</b>
Qureshi (2004)	training programmes should make provision for those with the desire and the ability to follow a subspecialist training programme to pursue such a programme.
Buchen (2005)	Concluded that institutions have changed future-driven professional tertiary education, training and corporate productivity in the corporate world. There was no reason that such educational change was not transferable to education in the private medical sector.
Dahlenburg (2006)	Expressed the concern that medical school graduates in Australia lacked the skills and the experience to enter specialist and subspecialist training, that medical schools lacked the resources to oversee postgraduate programmes, and that there was a drive to shorten education programmes. It further supported the establishment of the independent National Healthcare Education Council, which was funded by the Australian Health Ministry, and it was recommended that it included all stakeholders.
Bhattacharya (2010)	Identified that India was aware as the rest of the world that the number of training institutions that they had for plastic surgery in India and trained surgeons was far below their national requirements. The solution to increase subspecialist numbers and quality, to maintain standards, and to ensure a vibrant private sector should take priority, to assist medical colleges in the training of subspecialists.
Castanelli, Stevenson and Monagle (2010)	Acknowledged the need for qualified anaesthetists for paediatrics, and, specifically, that neonatal anaesthesia requires specialist expertise. Thus, as the medical workforce continued to specialise, the need to subspecialise was becoming more evident in Australia and New Zealand.
Maman-Dogma, Rousseau, Dove, Rodrigues and Meterissian (2011)	Concluded that: <ul style="list-style-type: none"><li>• There was no sound evidence that either shortening or lengthening of specialties could be supported,</li><li>• The integration of competency-based medical education (CBME) in a time-based format was a challenge for postgraduate medical education (PGME) programme</li></ul>

Author	Brief synopsis of research
	developers, and <ul style="list-style-type: none"> <li>• If implemented appropriately, integration of such education might significantly influence the length of postgraduate training, either by shortening or lengthening the duration overall.</li> </ul>
Adams and Biller (2014)	Found that the development of specialised educational and certification programs in vascular neurology have largely been successful. However, problems still existed in the training programs. These issues needed to be addressed promptly by both professional and public advocacy groups.
Kirwin and Conroy (2016)	Proposed streamlining graduate medical education to increase efficiency and enhance cost-effectiveness while simultaneously increasing the number of psychiatric subspecialists in these key areas, to address the disparities in access to psychiatric care. . It was also proposed that trainees interested in subspecialties completed their general training in three years, while meeting ACGME required milestones, and then utilised their fourth year to complete subspecialty fellowship training.

Table 1 shows the need for the necessary resources to train medical subspecialists, the problem with the number of subspecialists required as well as the duration of subspecialist training.

**SOUTH AFRICAN RESEARCH ON SUBSPECIALTY TRAINING**

Silwa, Zühlke, Kleinloog *et.al.* (2016) provided an overview of the current state of cardiology, cardiothoracic surgery and paediatric cardiology. Their report shows that there is a minimal change in the number of successful qualified specialist training, but rather a decline per capita. They recommend the establishment of a private training centre for cardiologists.

Wilmshurst, Morrow, du Preez *et al.* (2016) alluded to the challenge that the brain drain is substantial for health care workers in resource-poor countries. They refer to a study assessing the career intentions of medical students from 6 sub-Saharan African countries found that 40% planned to train abroad and 21% intended on relocating outside sub-Saharan Africa. The factors for the lack of retention were listed as career and training opportunities, remuneration, access to

equipment and advanced technology, regulated work environment, and the politics of health care in Africa.

The continuous drain of publically-trained medical trainees being recruited to the private sector, for various reasons, has influenced the number of medical subspecialists. These reasons include better working circumstances and remuneration, as well as emigration to advance careers owing to a lack of training capacity in South Africa. Furthermore, the continued reduction in the medical budget, caused by reductions in all government expenditure for health-care, in line with macro-economic policy, has had a negative effect on the academic institutions, which adversely affects all aspects of training, including specialty and subspecialty programmes (Benatar, 2004).

Mullan (2005), in his report on the effect of the brain drain on developing countries, highlights the fact that South Africa is one of the greatest contributors, or source countries, of physicians to the four major beneficiary countries, namely, the United States, Canada, the United Kingdom, and Australia. The trend of migrating physicians will cost South Africa in terms of financial resources (investment in education) and human capital. Ogbu (2006) supports Mullan's (2005) assertion that countries should create ethical and effective solutions to counter these worrying trends. Apart from the effect of the brain drain, the depletion of the medical workforce, and its instability, impacts heavily on disease-reduction initiatives in developing countries.

Van Niekerk (2009) refers to debates on the duration of medical education that date back to the beginning of the twentieth century. Van Niekerk's (2009) concern was about the duration of medical education, namely, that it was "crammed in between the explosion of medical knowledge", and that it needed to comply with acceptable global education and training standards, as laid down by the institutions and the Basic and Postgraduate Medical Education and Continuing Professional Development of the World Federation for Medical Education's 1994 constitution. Van Niekerk (2009) further identified that the financial burden of training, and the future earning capacity of the aspiring specialist and subspecialist made the career of specialist and subspecialist financially unsustainable. In a review article comparing gastroenterology training in private hospitals in India and South Africa, Mulder, Puri and Reddi (2010) call for a task force to be established in close cooperation with the Colleges of Medicine of South Africa, to investigate and review the training of the subspecialty of gastroenterology. Mulder *et al.* (2010) acknowledge the effect of the shortage of higher-educated and trained specialists, and the continued brain drain in the pursuit of achieving personal job satisfaction and career progression. Furthermore, they emphasise the difficulties inherent in upgrading the existing deteriorating training facilities, the need for new training institutions as well as the need to decrease and rationalise the duration of training.

Mulder *et al.* (2010) stress that the agreement between the South African government and Cuba on preventative medicine and primary healthcare has deprived the underprivileged population of specialist expertise. This is borne out by South Africa's infant mortality rate, which has been increasing since 1994. According to Baleta (2011), South Africa has an unacceptably high infant mortality rate, with neonatal death accounting for 35% of all deaths of children younger than five years. Mulder *et al.*'s (2010) proposal is to have a reduced core-curriculum training programme as well as a decentralised training programme, which creates training posts in accredited private hospitals, as is the case in India. The Indian private sector trains 60% of gastroenterologist subspecialists. South Africa has many similarities with India, as both countries have multicultural, multilingual populations, who coexist in public and private healthcare sectors with a similar poverty load.

In a model for integrated care, submitted to the relevant stakeholders, regarding oncology services in the Western Cape, Gouws (2011) proposed a PPP between the Department of Health of the Western Cape, the oncology departments of the two academic institutions, namely, Stellenbosch University and the University of Cape Town as well as the private oncology practice GVI (Gouws Venote Incorporated) Oncology. The partnership established a facility on the Cape Flats, which brought oncological services to the public. It also included a training facility for medical trainees, such as medical physicists and therapy radiographers, as well as clinical and radiation oncologists. From an education and training perspective, this would help relieve the load of the stretched training capacity of the two Western Cape academic institutions, and would give the trainees exposure to both the private and the public sectors, which so often is lacking in qualifying clinicians (Gouws 2011).Peer and Fagan (2012) concluded that concerns have been that universities and hospitals have not ensured adequate teaching facilities and these need to be addressed.

### **RESEARCH METHOD**

A two-step process was used in this research. First the role-players in the medical training education process were identified and in-depth interviews conducted to clarify their respective roles in the process and also to explain the actual medical subspecialty training processes followed. The second step of the research involved a critical analysis of literature to explore alternative PPP frameworks.

To enable the development of a framework to implement PPPs in the training of medical subspecialist, a literature search was conducted to identify as many studies as possible which aimed to explain PPPs in general and also specifically in healthcare. International and national

database searches were conducted by the Nelson Mandela University library, and to date they included Sabinet databases, ISAP (National Library of South Africa) and SAe Publications, EBSCO: MasterFile Premier, Business Source Premier, Academic Source Premier, FS Articles First; Kovsidex; SA Cat and FS Worldcat, Science Direct, UPECAT, Google searches, Dialog; Pubmed; Dissertation Abstracts database and the database of Nexus.

In this study, secondary data in the form of a meta-analytical literature review was used to identify how to use PPPs in the training of medical subspecialists. A process of conceptualisation was applied to review critically and analyse the data. This included disaggregating a large quantity of data into meaning and related parts or groupings (Crews 2010). A total 2560 articles were retrieved and only 120 articles were found useful in the analysis. Articles discarded mainly focused on non-training activities that had no relevance to the research at hand namely PPPs in training of medical subspecialists. In addition information on a successful pilot at the University of Stellenbosch were also obtained and used.

The results of this two-step research process enabled a proposed PPP framework and included explanations of the components of the framework. Thus in-depth interviews with relevant participants in the field of medical subspecialty training facilitated the clarification of the actual process followed in training. Literature on PPPs as well as information on a successful pilot assisted in proposing a possible PPP framework for training medical subspecialists.

### **Interviews results to clarify the process of subspecialty training**

In-depth semi-structured interviews were conducted with the medical subspecialty training role-players. In total, six interviews were conducted including the following stakeholders in the medical subspecialist education and training process:

- a) Colleges of Medicine of South Africa – one participant
- b) Health Professions Council of South Africa – one participant
- c) Academic institutions – one participant
- d) Subspecialty representative organisations – two participants
- e) Funders of medical services – one participant

An interview guide assisted in obtaining information from the participants. The interviews were recorded and transcribed and then the responses were analysed according to themes. Eight themes as shown in Table 2 were identified.

**Table 2: Themes in training a subspecialist and corresponding role players**

<b>Theme in training</b>	<b>Role player involve</b>
1. The number of subspecialists to train	South African government, via the Health Professions Council of South Africa (HPCSA)
2. The academic content (curriculum)	Academic institutions
3. Curriculum accreditation	Colleges of Medicine of South Africa (CMSA)
4. Registration of subspecialists to enable them to practice	Health Professions Council of South Africa (HPCSA)
5. Facilities for subspecialists to practice their profession	The healthcare sector
6. Regulate members with regard to professional matters – peer review	Specialist and subspecialist societies
7. Finance for the delivered medical service and medical training	Insurers, medical aids, and funders
8. Grants for medical training	Corporate foundations

Source: Researchers own construct

Once the themes in the training process and role players were clarified, literature regarding PPPs needed to be assessed critically.

### **PRIVATE PUBLIC PARTNERSHIPS**

The introduction of PPPs in South Africa has enabled major healthcare reforms mainly to accelerate the efficient delivery of healthcare services at costs that are affordable. These partnership relationships have ensured major private investments which would otherwise not have been possible with the limited public resources.



Although many definitions on PPPs (Kaser Associates 2005; Raman & Bjorkman 2009; Ramaih & Reich 2006; Smith 2008) exist there is agreement that a PPP is a “*government service or private business venture, which is funded and operated through a partnership of government and one or more private sector businesses*”. It is important that the driving principles for such initiatives be rooted in '*benefit to the society*' rather than '*mutual benefit to the partners*'. The law and related policies in developing countries should ensure that specific guidelines assist the private public relationships. Guidance is needed in a number of areas such as the roles of the public sector and private sector in the PPP relationship. Assistance is further needed on the governance structures, decision-making process and responsibilities of the people and institutions in the PPP relationship. It is vital that both the private and public sector roleplayers be accountable for their performance.

PPPs can take various forms. Kadefors (2004) focuses on trust in partnering and based on this focus, distinguishes three main characteristics of partnering. The first is to have mutual objectives for all the parties involved where economic incentives for cooperation are one of the important factors. But the development of society could also be considered as an important stimulator for public organizations. Kadefors (2004) stresses that if there is a strong focus on economic incentives, co-operation may be attributed to self-interest rather than to a benevolent attitude. Thus, clear definitions supported by regulatory approval must be clearly-defined to avoid self-serving potential, conflict of interest and assure transparency. The second characteristic is to have an agreed method of problem resolution. It is important that the different participant goals are discussed and what consequences this might have on all the role players. The third important characteristic is to have an active search for continuous measurable sustainable improvements. These systems should be formalized, clearly-planned and structured.

Fombad (2014:66) researched PPPs and focussed on the techniques available for enhancing accountability in PPPs in South Africa. Fombad (2014) concluded that that several measures needed to be adopted to enhance accountability such as clarifying accountability relations, monitoring measures, transparency, ethical standards, risk transfer and institutional reform. Effective leadership would maintain the momentum of the partnership and ensure that goals were met in the agreed time-frame and that those responsible for missing deadlines were held accountable. Table 3 further expands the research conducted on PPPs.

**Table 3: Research on private public partnerships (PPPs)**

<b>Author</b>	<b>Year</b>	<b>Country</b>	<b>Overview</b>
Broadbent and	2003	UK	This research introduces research conducted

Author	Year	Country	Overview
Laughlin			globally. Nature, regulations, pre-decision analysis and post-project evaluation are addressed. PPPs are important in the provision of public service all over the world and need to be on research agendas.
Meng-Kim	2004	Singapore	The case in Singapore provides an illustration of how a health policy can achieve the national health goals while considering equity and efficiency.
Buse and Harmer	2006	Global	Global public-private health partnerships (GHPs) have become an established mechanism of global health governance. They present seven actions that would assist GHPs to adopt better habits which, it is hoped, would make them highly-effective and bring about better health in the developing world.
Kolk, van Tulder and Kostwinder	2008	Netherland	This research analyses the characteristics of development activities undertaken by companies individually and jointly via public-private, private-nonprofit and tripartite partnerships. Using multinationals originating from the Netherlands as empirical settings, they found that private-nonprofit partnerships were most common, with tripartite and public-private partnerships only emerging, also owing to divergent views between business and government.
Jamali	2004	Lebanon	The concept of PPP has attracted worldwide attention and acquired a new resonance in the context of developing countries. PPPs are increasingly heralded as an innovative policy tool for remedying the lack of dynamism in traditional public service delivery.
Raman and Bjorkman	2009	India	The research discusses selected PPP frameworks in action in India and use amongst others healthcare services as an example. Three ideal

Author	Year	Country	Overview
			strategies are identified, namely, Regulation, Institutional System and PPP. The study concludes that PPP is not privatization, with the government still playing a critical but new role.
Ramaih and Reich	2006	Botswana	This research examines the processes for building highly-collaborative PPPs for public health. The processes are analysed for the African Comprehensive HIV/AIDS Partnerships (ACHAP), a five-year partnership (2001–2005) between the government of Botswana, Merck & Co., Inc. (and its company foundation), and the Bill & Melinda Gates Foundation. It identifies five lessons for managing relationships in highly-collaborative PPPs for public health.

Source: Researchers own compilation

Against this background of PPP research outlined in Table 3, this paper proposes a possible PPP to facilitate the training of subspecialists in South Africa. In addition the proposed PPP also considered a successful pilot at the University of Stellenbosch in the subspecialty of Reproductive Medicine (Department of Obstetrics & Gynaecology 2015). The University of Stellenbosch and a private hospital group who supplied an academic grant to train Reproductive Subspecialists in the private sector both in the Western and Eastern Cape executed a very successful pilot on training reproductive subspecialists. The program has since inception qualified eight fellows in Reproductive Medicine and four in training via the distant learning initiative. This program is also extended to other centres and has also developed to supporting sixteen embryologic laboratory staff with financial support obtained from abroad. The objective in a broader sense is that it can be extrapolated to all subspecialist disciplines (Department of Obstetrics & Gynaecology, 2015).

**A proposed Private Public Partnership framework for subspecialty training**

Table 2 outlines eight components in the training of subspecialists. To use these components to ensure effective training requires, amongst other factors, funding and accreditation by the regulators and academic institutions. Figure 1 outlines a proposed PPP framework for subspecialty training in South Africa.

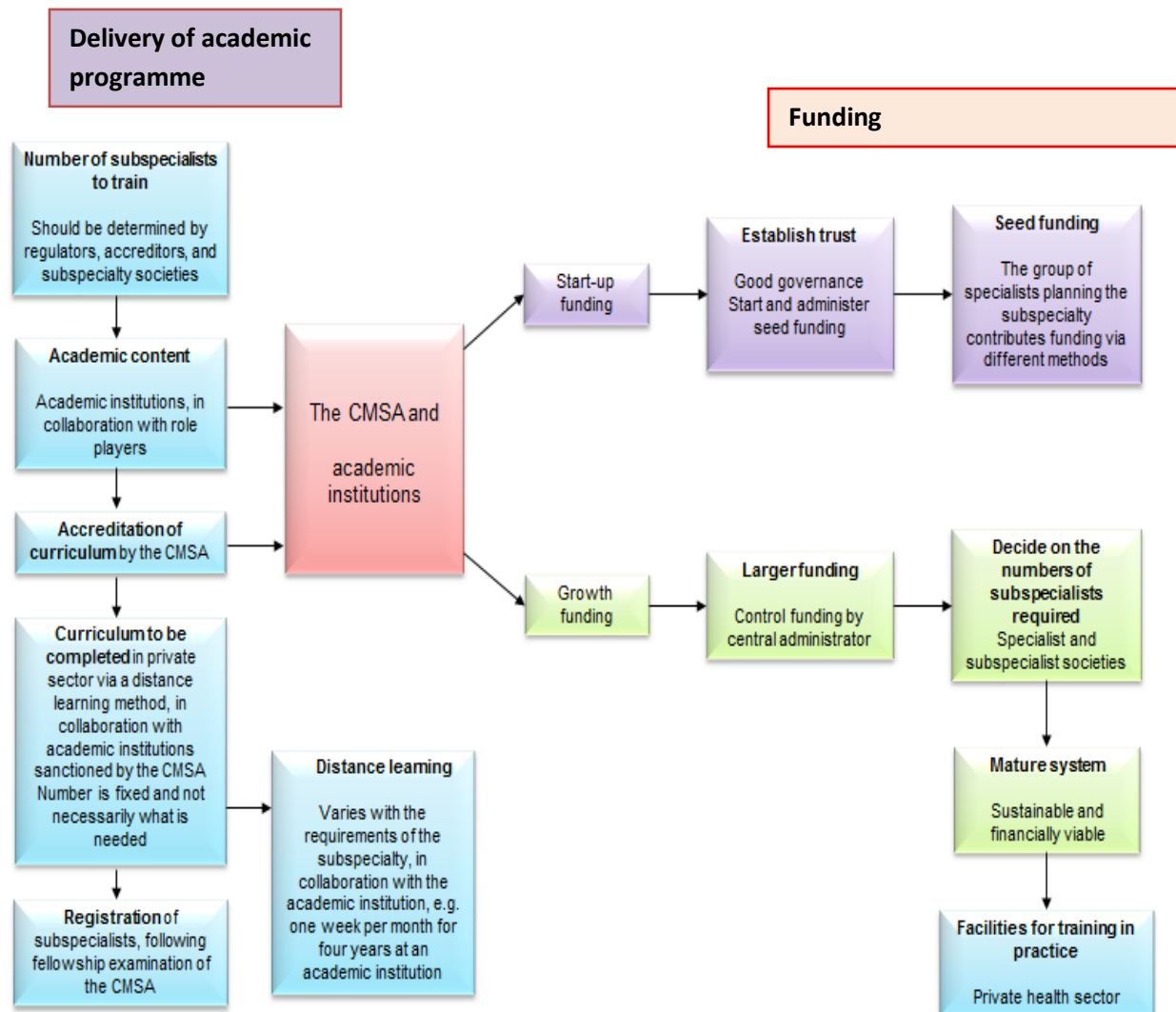


Figure 1: Proposed PPP framework for subspecialty training

Source: Researchers' own construct

Figure 1 indicates two specific areas where PPPs will need to focus on, namely, the delivery of the academic programme and financing of the academic programme.

### Delivery of the academic programme

As indicated in Figure 1, the CMSA and the academic institutions play a pivotal role in the process. The CMSA is the central administrator of academic matters in medical training in South Africa. Therefore the role of the CMSA in subspecialty training is not to provide direct training,

but to assist, in collaboration with the training institutions, in designing, implementing and improving postgraduate programmes to ensure that they are educationally sound and of the desired standard (CMSA 2003). To ensure that more subspecialists are successfully trained, a process needs to be followed. This process will enhance the numbers of subspecialists for the future in both the public and private sector, ensure succession planning, and maintain academic standards. This process relates to sub-speciality training, namely, numbers, academic content, curriculum completion, accreditation, registration and facilities to practice.

### **Subspecialty training numbers**

The number of subspecialists posts in public hospitals attached to the medical schools are limited and with time is becoming a more concerning problem. These posts are controlled by the HPCSA, and are allocated strictly according to the number of existing posts at training institutions as well as the academic staff that are accredited to train. These training posts are registered and allocated to the faculties of health sciences. Over the years, moratoria have been placed on these posts, owing to fiscal constraints. These moratoria have resulted in a drastic reduction in the number of training posts.

Because of the constraints on specialist training posts, the faculties of health sciences are reluctant to fill specialist posts with trainee subspecialists, as the focus of postgraduate training is on general medicine in the different specialties. Estimates of the numbers of subspecialists required to continue a particular subspecialty should be determined by several role players, and not only by government. It is proposed that the subspecialist society which represents its members and works closest to them take more responsibility in advocating for the required practising numbers for both the private and public sector. It is strongly advised in this proposed framework that such societies, in collaboration with the regulators, namely, the Department of Health via the HPCSA, find common ground and establish a working relationship to assess on a regular basis what the requirements of a subspecialty are, to predict over time the required number of subspecialists, and to relay this information to the educational institutions. Furthermore, that the regulators make the paradigm shift that subspecialist post numbers are allocated to the PPPs to complement the present training subspecialist training state system to legalise this to allow the joint-training venture.

### **Academic content of the subspecialty**

Historically, development and maintenance of curricula were the sole responsibility of the different disciplines of medical training in the faculties of health sciences of academic

institutions. However, in order to maintain uniformity among the different faculties of health sciences, as well as to maintain standards, credibility and reciprocity with international colleges of medicine, such as the Royal Colleges, the American Colleges, and other colleges, the CMSA ensures that this is one of its major functions. To develop academic content, it is important that collaboration between the academic institutions and the CMSA be maintained.

Distance learning facilities need to be developed and accredited according to strict guidelines by academic institutions, representative societies, the CMSA and HPCSA, which would need to be sanctioned regulators. Although Satellite Teaching Hospitals linked to Medical Schools are accredited by the HPCSA, it is important that private practice with subspecialists also be accredited to train subspecialists via distance learning. In view of the distance-learning method of instruction, academic requirements need to be adapted, so as to accommodate this change, where required.

### **Curriculum completion**

A distance-learning model of instruction is proposed, where the curriculum is completed partially or mainly at the private institution as would be agreed upon by the two institutions according to the discipline and where the potential trainee subspecialist practises. One possible way is to agree that the trainee spend a 25% of his/her time in training the subspecialty and continue with their normal specialist practice in the other time. It should be noted that the private institutions where the curriculum would be completed has fully-collaborated with the academic institutions and the CMSA regarding this. The academic institutions would also have to accommodate this mode of instruction and training.

### **Registration of subspecialists**

Once the curriculum is completed, an examination would need to be written under the auspices of the CMSA. If the candidate passes this examination, he/she could register as a subspecialist with the HPCSA. This allows the HPCSA, as a statutory body, established in terms of the Health Professions Act (Act 56 of 1974), to protect the public and to provide guidance to registered healthcare practitioners. It further regulates the health profession with regard to registration, education and training as well as professional conduct and ethical behaviour. It also ensures continuing professional development and promotes compliance with healthcare standards. No subspecialist would be allowed to practise without this registration.

### **Facilities to practise**

It should be realised that if the private sector plays a role in the training of the subspecialist, then, following the completion of their training, subspecialists may use the facilities of the private

sector to practise their subspecialty. This would be encouraged, but should not be a mandatory proviso from the facility that supported the subspecialisation. Private hospital groups as a sector are probably the most important beneficiaries of the medical education system of the state in South Africa. The three major Johannesburg Stock Exchange-listed hospital groups include the Netcare Group, Mediclinic and Life Healthcare. There are also new independent private hospitals that have developed, which have tended to be involved in day-care facilities.

Furthermore, subspecialists that complete their training at a particular private hospital would most likely choose to stay at that facility, from which the subspecialty would be practised owing to the fact that a patient base already exists. However, the public sector may and should be encouraged to use this initiative to increase the number of subspecialists in the public sector.

### **Funding for the training programme**

It is proposed that the funding to support such a complementary medical educational system based on a PPP would be obtained from the private sector, as the private sector is a major beneficiary from the state medical educational system. The governance of such funds must be self-sustainable, financially viable and scrutinised by good governance. Although the main function of the CMSA is to be the custodian medical quality in South Africa, they could play a pivotal role in a legal entity that would be managed by a representative board of the participants in this venture to ensure the required governance.

In the beginning, seed funding would be required to initiate the project. This seed funding could be obtained from a private medical institution, such as a private hospital group, a medical insurer, or the pharmaceutical industry. It is further suggested that the medical practice that would benefit from the services of the trainee subspecialist also contribute funding and support on an ongoing basis. The private hospital where the trainee subspecialist practises should further contribute to the funding, as the private hospital benefits directly from this, not only in services provided, but also in stature and recognition for association with the services of the subspecialty and the academic institution. It is envisaged that subspecialty training be replicated on a much larger scale. The administration of these funds by the management entity in collaboration with a private organisation would allow parity across all medical disciplines. For example, it would ensure that subspecialist training takes place equitably.

### **RECOMMENDATIONS AND IMPLEMENTATION**

To successfully implement the proposed PPP training framework, the following are recommended:

1. The current subspecialist education system should be kept intact, and where possible, institutions not involved in subspecialist training should position themselves to train subspecialists in the future.
2. The new framework should be a complementary framework to the current state-run education framework, in the form of a PPP.
3. The CMSA and the academic institution faculties of health sciences should be the gatekeepers of the new framework in all aspects of standards and credibility.
4. The CMSA should utilise its current financial administrative capacity in partnership with private contributors. Its core function regarding the framework should be ensuring good governance and sustainability.
5. The academic institution faculties of health sciences should continue to take the lead and monitor any required changes to deliver the curriculum in a new distance mode, so as to accommodate the new framework and, together with the CMSA, implement it as required.
6. Clinics in the private sector in need of a subspecialist owing to extending their services or in the case of retirement, should recruit a potential subspecialist interested in the subspecialty from within their demographics. They should also support the trainees during their training to ensure their return to the institution where they have trained for their subspecialty.
7. All role players should accept that subspecialist societies play a larger role in decision making for the discipline, and particularly in assisting the management entity together with the CMSA in selecting candidates, who deserve, deciding on practising numbers, and other activities, where applicable.
8. The regulators should exercise visionary new leadership when it comes to subspecialist education, and they should allow the private sector to assist them.

## **CONCLUSION**

The proposed PPP would provide for an alternative or complementary method of financing subspecialist training, which has to compete in the public sector for funding for specialist education. Thus, alternative funding would be available using the proposed framework, where collaboration with the private sector is further encouraged. Owing to the aging profile of the subspecialist workforce currently in practise, as well as the reduced capacity for training, there is a shortage of and continuing decline in the numbers of subspecialists. This proposed framework would address these declining numbers in both the private and the public sector. Most subspecialists practise their subspecialty in the larger centres, attached to academic institutions and major metro poles with well-equipped private hospitals. The proposed framework ensures redistribution of subspecialists and expertise to the smaller centres, allowing a truly national representation. This would bring about a better distribution of medical expertise in the country.



As a lengthy period of time is required to train a doctor to the level of subspecialist (on average, 15 years), this proposed framework would allow the training subspecialist to train in the subspecialty of choice, while still earning a more suitable income than in the state sector. As a result, the trainee subspecialist would not need to forfeit income while training. Such a system would be more sustainable, and would create an incentive for specialists to pursue subspecialty training.

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