

ISSUES IN MEDICINE

Models for increasing the health workforce

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A stable human resource base in the health sector is critical to achieving health-related Millennium Development Goals. There is a severe quantitative and qualitative shortfall of healthcare professionals in South Africa, and the existing and future health workforce production is inadequate for our healthcare needs. The production model must include all healthcare disciplines because

the quadruple burden of disease necessitates multi-professional healthcare teams working synergistically to improve health outcomes and life expectancy.

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The global context

A stable human resource base in the health sector is critical to achieving health-related Millennium Development Goals. Suboptimal education and training is cited as a root cause of the 'African health workforce crisis'.¹ Sub-Saharan Africa's health personnel/population ratios are the lowest in the world, and maldistribution between rural and urban areas is marked. Investing in training is thus crucial to address the health workforce crisis.

The *World Health Report 2006*² emphasises the importance of developing a capable, motivated and supported health workforce to achieve national and global health goals. Strong educational institutions providing professionally regulated and quality-assured/accredited training programmes are essential to achieve the required quantity and quality of health workers. Strong and innovative stewardship of the anticipated growth of private education and services providers is needed, particularly in developing countries.

The Global Health Workforce Alliance³ recognises the importance of increasing education and training to meet country-specific health care needs, acknowledging the health workforce as the cornerstone and driver of the health system. It suggests engaging with the private sector in setting up new higher education institutions and campuses.

The South African context

South Africa adopted an outcomes approach for its Programme of Action 2010 - 2014 to advance economic growth and development, to be realised by delivery and performance agreements with the 34 cabinet ministers overseen by the Department of Performance Monitoring and Evaluation in the Presidency.⁴ The government prioritised health and education, and these ministries have formulated strategic plans towards their outcomes.

The higher education perspective

The *Ministerial Statement on Higher Education Funding: 2009/10 to 2011/12* cites planning, funding and quality assurance as crucial in facilitating the delivery of high-level professional skills, research and innovation that contribute to national economic growth and

development.⁵ The health workforce is explicitly mentioned as an imperative professional skill in the education-related outcome of 'a skilled and capable workforce to support an inclusive growth path' in terms of output 4, which also seeks to 'increase access to high level occupationally directed programmes in needed areas' with a target graduate output in the animal and human health sciences of >15 000 per annum by 2014.⁶

The *Green Paper for Post-School Education and Training* recognises that the higher education system cannot accommodate the projected participation rate of 23% by 2030, suggests the establishment of two new universities, and acknowledges that the role of the private higher education sector must be better understood and supported by government. The Department of Higher Education and Training (DHET) will develop a nuanced strategy to work with established private providers, especially in priority areas, to strengthen and expand provision and to ensure that education and training by private providers occurs in compliance with quality and accreditation requirements. Possible partnerships between public and private institutions should thus be explored within a defined regulatory framework.⁷

The South African Committee of Health Sciences Deans reported to the DHET that student intake exceeds university capacities in most programmes, which are over-subscribed 2- to 10-fold in different universities by applicants meeting the minimum admissions criteria. Challenges precluding an increased intake include inadequate infrastructure (i.e. teaching and learning spaces, skills laboratories and residences, clinical training platforms), shortage of clinical supervisors such that staff/student ratios recommended by the professional councils cannot be effected, increased operational costs (especially transport costs linked to distant clinical training), and a dwindling academic health workforce. Although the Infrastructure and Efficiency Grant and Clinical Training Grant earmarked for increasing the quantity of health professional graduates and quality of clinical education and training have facilitated an increased intake and output, they do not meet the delivery agreement of the skills-related outcome.

The health perspective

The outputs and measures associated with 'a long and healthy life for all South Africans', viz. 'increasing life expectancy, decreasing maternal and child mortality rates, combating HIV and AIDS, decreasing the burden of disease from tuberculosis and strengthening health system effectiveness', require a skilled, competent health workforce accessible to all South Africans,⁸ as does implementing the 10-point Strategic Plan of the Department of Health, particularly in terms of the National Health Insurance, providing South Africans

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with affordable universal health coverage from 2012.⁹ The shortage of about 80 000 healthcare workers would be addressed by training additional healthcare workers and looking externally for more specialists.¹⁰ The latter option may be constrained by the registration and practice of foreign healthcare professionals by the professional councils and the *WHO Global Code of Practice on International Recruitment of Health Personnel*.¹¹

The World Bank quotes the ratio of medical doctors and nurses in South Africa as 25.1/100 000 population (11th highest of 48 countries) and 140/100 000 population (9th highest), respectively.¹ Although better than the sub-Saharan Africa average of 15.5 doctors/100 000 population and 73.4 nurses/100 000 population, these figures are lower than those in comparable developing countries (India, Korea, Singapore and Vietnam), which have 106.3 doctors/100 000 population and 220.4 nurses/100 000 population, respectively.¹

The 2030 draft human resources strategy for the health sector predicts increases as follows from 2011 to 2025: medical practitioners 28/100 000 to 36/100 000; professional nurses 98/100 000 to 130/100 000; all nurse cadres 293/100 000 to 354/100 000; pharmacists 8/100 000 to 10/100 000; and total allied health workers 79/100 000 to 98/100 000.¹²

Health worker density per 100 000 population is lower in South Africa than in its benchmarked countries, including Brazil, Russia, India and China.¹³

All comparator countries have both public and private providers of higher education in the health sciences.

A multi-pronged approach to increasing the health workforce

Earmarked grants

Existing funding mechanisms can be leveraged as follows:

- The Infrastructure and Efficiency Grant should address infrastructural needs.
- The Clinical Training Grant should continue to advance quality clinical training, specifically human resources and operational aspects.
- The imminent allocation of the Health Professional Training and Development Grant to universities provides an opportunity to re-negotiate joint health education and services agreements with their teaching platforms and staff establishments.

Expansion and refinement of inter-governmental partnerships

The South Africa-Cuba partnership to train medical doctors should be expanded to other priority healthcare professions. These graduates should be able to integrate into the South African health workforce with minimal induction or orientation. Choice of country should therefore include an English-speaking environment and a developing country that has a primary healthcare system. Foreign programmes should be accredited by the relevant professional and quality council(s), and South African-specific curriculum content should be integrated into the programmes and delivered by staff exchange programmes.

Private providers

Public-private partnerships between South African public universities and private higher education providers

Private higher education providers registered by the DHET could enter into public-private partnerships in which the public university allows the private higher education provider to offer its accredited programmes. A memorandum of agreement would be endorsed by the Minister of Higher Education and Training, as there is a policy

gap in this area. The public university would enrol the students, facilitate programme delivery and award the qualification, as in many African countries. This would require accreditation of additional teaching sites, and it would take less time to admit the first students. For such a step to take place, the public university must have met its DHET-approved enrolment targets and private students would be accommodated on the public health clinical training platform once all public university students have been catered for.

Split-site education and training

Health sciences students could undertake their preclinical education and training in public universities but be placed with the private sector nationally or internationally for clinical training. The provisos for inter-governmental partnerships would apply for foreign clinical placements.

Independent private health sciences higher education institutions

Health workforce production could be further augmented by private higher education providers registered by the DHET, offering programmes accredited by the Council for Higher Education (CHE) and relevant professional council.

Quality assurance and stewardship of private providers

Quality assurance processes related to registration as a private higher education provider and accreditation of programmes would ensure stewardship by the national ministries of Health and Higher Education and Training, as outlined:

- Registration as a private health sciences education provider by the DHET includes confirmation of eligibility to register in terms of the Higher Education Act of 1997, establishment of a juristic person in terms of the Companies Act of 1973, proof of financial viability and proposal/s to offer programmes registered on the National Qualifications Framework (NQF).
- Application for programme accreditation must comply with the CHE and South African Qualifications Authority – programmes must be full qualifications and registered on the NQF. This requires institutional and programme information and evidence of application for programme accreditation to the Higher Education Quality Committee of the CHE.
- Programme accreditation by the relevant professional council includes programme accreditation, contracts with national and provincial departments of health for student clinical training placement, and accreditation of sites for clinical/experiential learning.

Mutual benefits

- The health system would benefit by service delivery during clinical training/experiential learning, internships and community service, and a larger health workforce to address the burden of disease and NHI implementation. The health system could further benefit by a clinical training fee for students accommodated on the public clinical training platform.
- The higher education system would benefit by the private sector augmenting the production of a skilled and capable workforce in the scarce-skills healthcare professions.
- Public universities would benefit from student fees. Additional remuneration of public university staff for teaching and training services rendered to the private provider could enhance staff retention.
- The private provider would benefit as a 'for-profit' entity.
- South Africa would benefit from further/foreign investment and job creation.

Whatever the model, health workforce planning must be inclusive of all healthcare disciplines, because the disease burden, specifically the quadruple burden of disease, necessitates multi-professional healthcare teams working synergistically to improve health outcomes and life expectancy.

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