

EDITORIAL / VAN DIE REDAKSIE

The credo — reaffirming our professionalism

At its last meeting, held in Pretoria in July 1993, Federal Council adopted a new credo (see page xiii) for members of the MASA, the purpose of which is simply to reaffirm the commitment of the medical fraternity to ethical and professional conduct in the doctor-patient relationship. This is necessary in order to redefine the profession's social contract with society in terms of contemporary sociopolitical expectations and values, and as a response to the growing erosion of public trust in the medical profession worldwide.

The credo is not a legal document. It is simply a public statement of the principles by which the profession pledges to strive to conduct itself. It is a reaffirmation of medical professionalism, which one unpublished American Medical Association (AMA) working document defines as 'the status of being considered a true professional . . . a social contract between physicians and society that is based on trust'. These principles include the employment of medical skills and knowledge to promote the health of all without discrimination; the establishment of doctor-patient relationships based on mutual trust, mutual respect and the right of informed consent; respect for confidentiality; and the promotion of the integrity and caring nature of the medical profession.

As to why we need a credo, at least two reasons can be advanced. The first has already been mentioned, namely to prevent further erosion of public trust, and to counteract the growing cynicism about the profession which, in the case of South Africa, is attributable in part to our history of authoritarianism and discrimination not only in the political arena, but also in both the private and public health care fields. The credo confronts these negative attitudes in a positive and pro-active manner. The alternative, i.e. to withdraw into a laager of self-indulgent defensiveness, is simply not in the interests of the profession.

The second reason has to do with professional autonomy. As the AMA document points out, one of the many benefits of professionalism as defined above is 'the freedom to earn a living from the practice of one's profession, and to establish the basis for the economic relationship with those being served without external interference'. Obviously, no area of human endeavour can totally escape 'external interference' or some form of regulation in a modern society but, as the AMA is now finding out in the wake of Hillary Clinton's health care reform proposals, a medical fraternity that fails to establish credible and effective self-regulation can expect to be visited with rigid — and perhaps even punitive — regulation by the government. Society will not easily grant autonomy to a profession with which it does not have a relationship of trust. A first step in establishing such trust is for the profession to state publicly what it stands for. That for which it stands must be in harmony with the prevailing social values and norms.

All of us were brought up in the tradition of the Hippocratic Oath, which continues to enjoy our sentimental affection.

However, noble though it may be, the Oath no longer addresses the needs of contemporary society. Worse, the public no longer regards the Oath as anything more than a ceremonial document that each medical student receives and signs upon graduation. That is why the *Sunday Times* of 30 May 1993 could claim so confidently of the late Dr Jonathan Gluckman that 'he was one of a near-extinct order, a doctor absolutely dedicated to the principles of the Hippocratic Oath'.

The credo is a first step in the process of restoring our professional credibility in the communities we serve. But first, it must receive the full support of our hearts and minds.

DANIEL J. NCAIYANA

The quest for ethics in medicine

The question of medical ethics or standards and regulation is as old as the profession itself. It all started some 4 000 years ago with Hammurabi of Babylon. The early Greeks played an important role in this process and today, nearly 2 500 years later, the Hippocratic Oath needs no introduction. History has recorded that codes were formulated for the Ayurvedic medicine practised in India as well as the Nei Ching medicine of China. It is hard to believe that all of this occurred some 20 centuries ago.

The search for an appropriate code of conduct continued with a spate of codes emanating from the Western world. Some were named after institutes such as the Royal College, London. The first codes of both the American and British Medical Associations date back some 150 years, to 1847 and 1848 respectively.

The Canadian and American Associations are grappling at present with their respective codes and various ethical issues. I doubt that the quest for the ultimate code of conduct will ever cease. Societal change and medical advancement will demand continual introspection and ethical vigilance.

As regards our own search, members of the Association will know that sterling work has already been

done, and for this I commend all those who have contributed to this process. Our rapidly changing southern African environment demands that organisations and institutions continually reposition themselves in order to remain both relevant and effective. This does not apply only in the fields of business and politics, but is equally true for the MASA. I wish to address briefly some of the most pertinent societal trends which affect our profession in South Africa.

The paternalistic command-and-control, or authority model, has been relegated to history and is rapidly being replaced by a more open and participatory model of human interaction. This shift is evident across the full spectrum of our society from politics and business to the church. This shift has come complete with its own lexicon — 'participative management', 'joint decision-making' and 'customer input' are the buzz words in the business world. The medical profession needs to take cognisance of this shift.

The 'patient autonomy' model assumes a partnership in which the autonomy and rights of the patient are respected. It emphasises mutual rights and responsibilities. In keeping with the principle of holistic medicine the doctor recognises that the patient is a whole and intricate person, the understanding of whose needs will assist in determining the best medical option. Informed patient consent, which implies mutual decision-making

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based on open communication and mutual understanding, should be the rule.

This new approach to the doctor-patient relationship is however still built on the proven foundation of trust and mutual respect within the context of such vital issues as patient rights, consent, confidentiality, non-discrimination and professionalism. I believe that all of these should be enshrined in the guidelines of the Association.

Inclusiveness is another major societal shift in progress. This phenomenon is grounded in the wave of democratisation sweeping across the globe as well as our society. It is clearly related to the greater emphasis on openness, participation and joint decision-making.

The narrow, exclusive and admittedly more selfish approach to business and other enterprise is no longer the trend, which is towards greater inclusiveness and social responsibility. The world of business has already gone some distance in adapting to this trend by way of corporate social responsibility programmes.

The implications of this attitudinal shift will primarily impact on resource allocation decisions by a future democratic and therefore more inclusive government. Individual treatment decisions will increasingly be viewed against the effect on and relevance to society as a whole. This approach to health care is rooted in the principle of justice for all. It adds a dimension of utilitarianism, which considers the greatest good for the greatest number — health for all.

Finally, society is becoming increasingly litigious. This shift may well mean that the profession should expect to spend more time with lawyers and in court rooms than ever before. We have only recently witnessed the creation of the Patient Rights Organisation of South Africa (PROSA).

This shift is closely related to those already discussed but is also symptomatic of the erosion of trust in the profession. However limited the incidence, it cannot be denied that negligence and unethical conduct do occur within the profession.

A complicating factor in this regard is the perception that our tradition of close professional association as

medical practitioners is synonymous with protectionism. This perception is clearly not advantageous to the profession. It has, among other things, given rise to an 'us and them' polarisation. I believe it is incumbent on our Association to do everything in its power to root out unethical behaviour. We should not be perceived as protective of errant members. We must be seen to be committed to justice, and our tradition of close professional association should not be seen as causing us to abrogate our ethical responsibility to society as practitioners of a proud profession.

The promotion of medicine as a profession and of doctors as professional people are central elements of the strategic planning of the Association. This goal can best be achieved by the development and implementation of instruments of self-regulation, and of programmes to set standards. This points to a code of conduct. A home-grown, truly South African code of conduct which, I firmly believe, will go a long way to restore and rekindle the trust of the public in the medical profession.

The beginnings of such a code — the credo, a statement of the general beliefs and principles for the medical profession which embodies the values we hold dear — was considered by the Federal Council and I am happy to be able to report that it was adopted.

This credo (page xiii of this issue) is intended for permanent public display in the waiting rooms of medical practitioners and other health care facilities to serve as a public statement of our commitment to the principles of the medical profession, and to the maintenance of the highest ethical standards. Copies should reach every MASA member by the end of this month.

During a time of change and transition in our country and our profession we are reminded by William Bridges, author of *Transitions*, that change and transition are not the same. I quote: 'It isn't the changes that do you in — it's the transitions. Change is situational: the new site, the new boss, the new policy. Transition is the psychological process people go through to come to terms with the new situation.'

JOHAN KRÜGER

The public service labour relations shambles

Just what is the Government trying to achieve in the public health care sector? The passing of the Public Service Labour Relations Act is little short of a kick in the teeth, not only for the unfortunate doctors who are still struggling to maintain standards in a service which the Government seems hell-bent on destroying, but also for the Medical Association. The MASA had worked long and hard — with a high degree of apparent success — to try and persuade the powers that be that doctors were in a different situation from the anonymous army of *apparatchiks* who run the country's public services, and needed to have the right to bargain separately for better wages and working conditions through well-established professional bargaining mechanisms. That right has now been summarily removed from them by the passing of this infamous Act which was pushed through, presumably for non-disclosed political reasons, in the teeth of opposition from all those who could all too clearly see its consequences. Those consequences will at best be that more and more doctors in the public sector will give up the unequal struggle to stay in a service which seems to be run on the lines of a mediaeval

slave galley, and join the already overcrowded private sector. At worst, the brain drain from this country will become a torrent, as doctors who prefer to serve their patients in the public rather than the private sector despair of ever getting a fair deal from a government which seems quite impervious to reasoned argument, and simply depart for not necessarily greener, but fairer pastures.

Doubtless, attempts will be made to fill the resulting gaps by recruiting doctors from overseas, who will be unaware of what has been happening here. When a similar situation arose in Britain in the 1960s, the British Medical Association published in the professional advertisement section of the *BMJ* a small announcement which warned doctors to ascertain the BMA's views about the terms and conditions concerning certain professional posts before applying for them. Perhaps the MASA should now do the same.

N. C. LEE
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Sensitisation, pre-emptive and total analgesia

Pain is a complex phenomenon. Nociceptor stimuli that produce tissue damage, and a subsequent inflammatory response, result in alterations in the processing of sensory information at the spinal cord. This 'plasticity' is expressed as changes in the physiology and neurochemistry of spinal neurons,¹ causing an increase in the sensitivity of primary afferent nociceptors in the vicinity of the injury (peripheral sensitisation).² Noxious stimuli induce the release of both neuropeptides and excitatory amino acids at the synaptic terminal of the nociceptor afferent fibres in the dorsal horn.^{3,4}

Dorsal horn neurons have a form of excitatory amino acid receptor, the *N*-methyl-D-aspartic acid (NMDA) receptor, that acts to prolong the duration of synaptic potentials. At normal resting membrane potentials, the ion channel of the receptor-ion channel complex is blocked by a magnesium ion. An excitatory amino acid (glutamate) binding to the NMDA receptor will then produce no effect.⁵ If the membrane is depolarised by one of the other excitatory amino acid receptors or by a neuropeptide, the magnesium ion is removed. Sodium and calcium ions enter the cell, producing further depolarisation.⁵ Long-lasting disinhibition of primary afferent input to the dorsal horn occurs, resulting in an increase in the excitability of neurons.^{2,6} This is known as central sensitisation, and is manifest as a prolonged reduction in the threshold, an expansion of the extent, and an increase in the responsiveness of the cutaneous receptive fields of the dorsal horn neurons.⁶

Afferents that induce central sensitisation produce slow synaptic potentials in spinal neurons. Following low-frequency repetitive afferent activation, the slow potentials summate to produce a cumulatively increasing postsynaptic depolarisation. This leads to a progressive increase in the action potential discharge on repeated stimulation. This hyperexcitable state and neuronal plasticity in the dorsal horn neurons is called 'wind-up'.⁶

Central sensitisation allows recruitment of low threshold mechanoreceptor afferent input, which begins to produce pain. The expanded receptive fields lead to a greater number of nociceptive neurons being activated by a stimulus, and may ultimately be perceived as more intense pain.⁷

The NMDA complex is thus involved in sustaining or even magnifying pain transmission in the cord.⁸ Both the non-competitive antagonists (dizocilpine, 5-amino phosphovalerate,^{3,9} HU211,¹⁰ and ketamine) as well as the highly specific competitive antagonist 3(R-2-carboxypiperazin-4 yl)-propyl-1-phosphonic acid (or D-CPP, which binds to the NMDA receptor-gated ion channel), prevent wind-up and central sensitisation (in the rat spinal cord).^{6,8,11}

For optimal pain relief, any change occurring at the NMDA receptor complex should be prevented (for acute pain) or reversed (for chronic pain).⁸ The potential use of NMDA antagonists in pain management is a future consideration.

Pre-emptive analgesia implies that analgesia given before the painful stimulus prevents or reduces subsequent pain. Its purpose is to prevent or reduce any 'memory' of the pain stimulus in the nervous system, thereby lowering any subsequent analgesic requirement.¹² Physiological and behavioural animal studies show that noxious stimulus-induced neuroplasticity can be prevented or 'pre-empted' by the administration of analgesics prior to injury.¹³

Pre-emptive analgesia may protect patients from the deleterious effects of surgical incision and other noxious peri-operative events, long after the operation has been performed, by attenuating or preventing central sensi-

sation. In a small number of patients, a reduction in the incidence of phantom limb pain occurred after elective amputation for ischaemic vascular disease when, for 3 days before operation, the pain was reduced by administration of epidural local anaesthetic and opioid.¹⁴

Allodynia and hyperalgesia in post-surgical patients may be related to postoperative sensitisation of central neurons. A recent study showed increased sensitivity to noxious sural nerve stimulation in postoperative patients using subjective parameters and nociceptive flexion reflexes compared with a control group of volunteers.¹⁵ Another study showed that thoracotomy patients receiving epidural fentanyl before incision have less pain and need fewer analgesics postoperatively compared with patients receiving the same dose of epidural fentanyl after incision.¹⁵

Opioid premedication has been found to reduce the sustained hyperexcitability of the central nervous system to intra-operative stimuli, prolonging the pain-free period immediately postoperatively and decreasing the frequency of analgesic demands.¹⁶ The non-steroidal anti-inflammatory drugs (NSAIDs) (naproxen, indomethacin) given as premedicants have been found to decrease postoperative pain, and to lessen postoperative analgesic requirements.^{17,18}

In future, the provision of pre-emptive analgesia should engender multiple benefits not only in the acute peri-operative pain situation, but in preventing the development of neurogenic painful states.

The provision of pre-emptive analgesia is advantageous, but to be completely successful the following components are necessary: an opioid, a NSAID, afferent sensory blockade, sympathetic blockade, and anxiety-lolysis.¹⁹ The concept of 'total analgesia' is an attempt to provide this.

Total analgesia relates to the various combinations of four different types of analgesics used during the peri-operative period: opioids, local anaesthetics, NSAIDs, and α_2 -agonists.^{12,20} The rationale is that each drug exerts its analgesic effect via a different mechanism. Thus a low-dose combination might offer the best therapeutic effect while minimising the risks of unwanted side-effects seen with high doses of each of these drugs.

There is clinical evidence that the (spinal) combination of local anaesthetic and opioid may produce improved analgesia in a variety of pain states (after thoracic and abdominal surgery, and in childbirth).²¹ Combination therapy is useful in neurogenic and other pain states where there is a reduction or loss of opioid sensitivity. Here combination therapy may restore pain relief without the need to augment the dose and risk side-effects.

In the future, using combined therapy, several potential ways exist of maximising opioid analgesia. This will have a powerful influence on the injury response, and may even prevent the development of chronic pain syndromes in surgical patients.

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The resurrection of primary percutaneous transluminal coronary angioplasty for the treatment of acute myocardial infarction

The benefit of early reperfusion in acute myocardial infarction, either with intravenous streptokinase,^{1,2} anisoylated plasminogen-streptokinase activator complex³ or the relatively fibrin-specific recombinant tissue-type plasminogen activator,⁴ has been demonstrated in multiple large-scale, placebo-controlled trials. But the success of thrombolytic therapy may have led to the premature demise of primary percutaneous transluminal coronary angioplasty (PTCA). Now the results of three simultaneously published randomised trials have resurrected the issue of primary PTCA.⁵⁻⁷ Despite the efficacy of thrombolytic therapy, its widespread applicability has been limited for a variety of reasons. Analysis of the GISSI and ASSET trials show that in European practice about 63% of patients with acute myocardial infarction fail to achieve thrombolysis. In the USA the situation is even worse, with approximately 75% of patients not receiving any of the available thrombolytics.⁸ There are many reasons for this, including an uncertain diagnosis, contraindications to thrombolysis, late presentation, advanced age and cardiogenic shock. Uncertainty about the diagnosis clearly supports the need for an invasive approach which may be performed for diagnostic purposes and followed by PTCA if appropriate. Similarly, there is no argument about direct PTCA where contraindications to thrombolytic therapy exist, and in patients with cardiogenic shock; in the latter it has been shown to be of particular benefit, significantly reducing mortality rates.^{9,10} Likewise, the results of ISIS 2¹ have shown that the elderly stand to gain the most from thrombolytic therapy. Traditionally, the time limit for the administration of thrombolysis has been 6 hours.¹ The results of the recently announced LATE and EMARAS studies would extend this window to 12 hours and those of ISIS 2 to perhaps even 24 hours. About these issues there is no debate. The controversy centres on the utility of PTCA in those patients eligible for thrombolysis.

Protagonists of the invasive approach highlight the deficiencies of thrombolytic therapy including ineligibility, failure to consistently achieve coronary patency, re-occlusion, high-grade residual stenosis with recurrent ischaemia, and intracranial bleeding in a significant number of patients. Failure to achieve patency of the

infarct-related artery ranges from 9%¹¹ to 58%¹² depending on the lytic agent, loading regimen and time to administration from the onset of chest pain. Furthermore, coronary patency is usually graded according to the Thrombolysis in Myocardial Infarction (TIMI) classification, which defines grades 0 and 1 as a functionally occluded artery and grades 2 and 3 as partial and complete perfusion respectively. Until recently grades 2 and 3 were regarded as an indication of successful thrombolytic therapy but there is some evidence that TIMI grade 2 flow may, for the most part, represent an occluded rather than a patent artery.¹³ In the days following thrombolysis, the intracoronary milieu is extremely unstable, with further clot lysis and enhanced patency occurring in some patients but reocclusion occurring in approximately 30%. The observation that coronary patency may be a better prognostic indicator of short- and long-term outcome than residual left ventricular function led to the formulation of the 'open artery' hypothesis.¹⁴ Furthermore, despite adequate clot lysis most patients are left with a high-grade residual lesion caused by underlying atherosclerotic plaque,¹⁵ which may predispose to recurrent ischaemia or infarction. Finally, thrombolytic therapy is complicated by intracerebral haemorrhage in 0,5 - 1,5% of patients depending on the agent used and the aggressiveness of the infusion regimen, and may be fatal.

Non-interventionalists would counter these arguments by pointing out that neither immediate¹⁶⁻¹⁷ nor delayed¹⁸⁻²¹ routine angioplasty following thrombolysis reduced the incidence of death or reinfarction, or enhanced left ventricular function after acute myocardial infarction. This argument is not valid, however, since for unknown reasons angioplasty performed with or without prior thrombolysis may represent two very different subsets.²² Other factors militating against angioplasty include a re-occlusion rate of between 12% and 15%²³ and inappropriate dilatation in approximately 15% of patients in whom, as the TIMI and TAMI experiences would suggest, residual coronary stenoses are minimal following successful thrombolysis. The primary concern about angioplasty, however, is its lack of widespread applicability and possibly increased cost.

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Against this background, what new light do the three recently published⁵⁻⁷ randomised studies of direct angioplasty versus thrombolysis shed on the management of patients with acute myocardial infarction? Although the finding did not attain significance, patients assigned to angioplasty showed a lower incidence of death.^{5,6} Importantly, angioplasty was more effective in restoring patency, preventing reocclusion, recurrent ischaemia or reinfarction compared with thrombolytic therapy.^{5,6} Only one study was able to demonstrate improved left ventricular ejection performance in the angioplasty group using radionuclide ventriculography.⁶ The need for further intervention including revascularisation was strikingly greater in the thrombolytic group in all three studies. A criticism of these studies is that the ability to identify high-risk anatomy more suited to bypass surgery in the angioplasty group may have introduced a selection bias.²⁴ The opportunity to identify patients more likely to benefit from surgery, however, may be viewed as an inherent advantage of the overall strategy of primary angioplasty compared with thrombolytic therapy. Furthermore, analysis of the thrombolytic group in the PAMI study⁵ shows that even in this group, 63% underwent subsequent unscheduled coronary angiography, 36% angioplasty and 12% coronary bypass grafting for recurrent ischaemia. Crossover to other modalities of therapy thus affected both arms of the study and would be unlikely to bias the results in any significant way. The implications of this in economic terms are obvious. When defining the middle ground between rising costs and a technological revolution that is redefining the limits of health, it has to be pointed out that 'cost-saving' and 'cost-effective' are not necessarily synonymous. Even if thrombolytic therapy were cheaper than angioplasty *ab initio*, if it created an increased subsequent need for further intervention the initial cost saving would be lost. For this reason the Mayo group were able to show a lower overall cost for the angioplasty group.⁷

The results of these studies show primary angioplasty to be as effective as, if not superior to, thrombolytic therapy for the management of the patient with acute myocardial infarction. Does this mean that primary angioplasty now becomes the standard therapy for all patients presenting with acute myocardial infarction? The answer would not be an unqualified 'yes', given the lack of widespread availability of angioplasty. In the USA only 18% of hospitals are capable of performing angioplasty²⁴ and there is no reason to expect the South African situation to be any different. Therefore, for the majority of patients not within easy reach of an experienced invasive cardiac facility, thrombolytic therapy remains the treatment of choice. But where these facilities exist, primary angioplasty has been resurrected as a further strategem in the overall management of the patient with acute myocardial infarction.

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Primary health care depends on the district health system

It is now clear that the development of primary health care (PHC) depends on the success of the district health system (DHS). If the DHS is not working, then PHC becomes a mirage, and the goal of 'Health for All', which is a level of health that enables everyone to contribute to society, remains unreachable.

The World Health Organisation has described a district as 'first and foremost, a well-defined population, living within a clearly delineated administrative and geographical area . . . It includes all institutions and individuals providing health care . . .'¹

The DHS is crucial to the success of PHC because it provides a framework for local resource allocation and for rational planning to meet priority needs. It is the right level for engaging regular community participation in decision-making and, provided the authority is delegated, for implementation of national or regional policies in a form adapted to local needs. It is the most sensitive level for the evaluation of the health impact of these policies and decisions, and the most flexible level for improving them by modification. It is the level at which real collaboration with other sectors, such as education or agriculture, can happen. It is the level at which communication and collaboration with the non-governmental and the private medical care providers can occur. It is, therefore, the foundation on which all else in the health system rests.

And yet in South Africa there is hardly even the beginning of a coherent national system of health districts. Why?

The DHS idea is not new. Botswana and the UK, among many other developed and developing countries, have concentrated on district health management for decades, and the concept has been prominent in PHC literature for years. Perhaps South Africa's isolation from PHC ideas contributed to this delay in recognition of an internationally accepted principle. Perhaps the delay comes from the ambiguity which health authorities feel towards PHC's 'political' goals, such as equity. Our authoritarian and centralised decision-making process certainly conflicts with the decentralisation, autonomy and devolution of power inherent in a DHS approach. Perhaps our focus on hospitals, rather than the health of the population, blinds us to the possibilities of the DHS. Probably the most important problem comes from our fragmented health system which prevents coherent organisation that characterises PHC based on the DHS.

These problems have led to rivalry between different health authorities over declining public-sector expenditure, interprofessional conflict and a lack of teamwork within authorities and facilities, a paralysis of long-term planning and hasty decisions the long-term consequences of which are ignored. In the presence of more PHC rhetoric than ever before, the actual development of a health system based on the PHC approach seems far away.

We must develop functional districts now! This need not wait for the constitution to be finalised; it does not depend on the next elections. It waits only for each health authority to commit staff at the local level, and for them, with the major local political players, and representative community bodies, to begin discussing and developing mechanisms and boundaries for districts to function. The structure of the future Ministry of Health and the role of regions are properly the task of politicians to determine, with health sector input. But the functioning of district health care in a democratic manner can receive a kick-start if we begin now at local level.

This issue of the *SAMJ* contains articles describing the experiences of the Western Cape Regional Services Council² and the Tintswalo/Bushbuckridge initiative³ in the building of functional district health systems in their areas. Other councils in Durban and New Hanover, Natal, in Johannesburg and in the northern Transvaal are on the same path.

This issue also contains an account of the tricky process by which the Department of Health Services and Welfare in the House of Representatives integrated services through contracting (and paying) preventive care authorities also to offer curative services.⁴ The potential impact of integrated services for children is shown in an article which demonstrates that an integrated clinic misses far fewer opportunities for measles immunisation than a clinic whose curative and preventive services are administered by separate authorities.⁵

Tertiary care is overloaded with patients who could be dealt with at the district level, if appropriate facilities were available.⁶ The Cape Provincial Administration Hospital Services has opened a 24-hour rehydration service in the township concerned, which is now well used. Anecdotally, this is reported to have reduced the load on the tertiary centre, and more such units are planned.

If PHC is to be more than collaboration between different branches of the public sector, then many other important health care providers, such as the private sector and non-government organisations, must be included. A representative of a national grouping of health sector non-governmental organisations writes an opinion piece in this issue⁷ which clarifies their (significant) place in the DHS.

The concept of 'the district' is increasingly popular. While one conference is reported here,⁸ two others have recently occurred, one in the Durban functional region (personal communication — G. Solarsh), and another in the rural Transvaal (unpublished proceedings of a workshop). At all of these gatherings, the same words are heard: 'The only feasible approach to our health problems is well managed, comprehensive PHC based on a DHS'. How many more times will this be said before decisive action is taken?

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