Responsible use of scarce health care benefits

Health care needs are often perceived as being infinite, but financial resources are certainly not. As such, there is an increasing obligation placed on the medical profession as gatekeeper to health care resources to consider cost benefit issues, or simple 'value for money health care', in advocating new treatment strategies, or using new technologies or drugs. Arguably this has never been more critical than at the present time, as rapid advances in scientific research and understanding are being translated into a plethora of new technologies and drugs. Many of these, such as biological drugs and advanced imaging and surgical techniques to name a few, hold out the promise of a veritable 'brave new world' of therapeutic endeavour. Unfortunately this comes at a cost that is becoming increasingly unaffordable for many health care systems, including our own. The challenge of the next decade will be making space for such advances within fixed and restricted health care budgets, and ensuring access for deserving patients to new and life-enhancing therapies.

This will demand prioritisation of resources, since additional costs for new and innovative investigations and treatments inevitably restrict access to resources in other areas, unless budgets increase accordingly.[1] However, much can be achieved short of rationing through addressing the simple and the obvious, such as the removal of wasteful practices from the system, and this should apply to all stakeholders including funders, administrators and health care professionals. Two articles published in the current issue of the SAMJ illustrate aspects of this.

The first, by Pretorius,[2] examines the utilisation of pathology procedures in the South African private sector. The author shows that there is considerable variation in the utilisation of procedures and cost between laboratories and that this appears to bear little relationship to geographical differences in disease patterns or factors related to patient care. The author claims that the variations observed can be explained at least in part by factors under the control of the laboratories themselves, such as the design of the request form, which lends itself to manipulation of utilisation. Of concern, there is also suggestion that excessive utilisation of at least one test performed in hospital may be influenced by the vested interest of a corporate shareholder. Pretorius claims that the design of the current request forms, with their expanding profiles and reflexing of tests, is responsible for significant over-utilisation of test procedures and unreasonably high pathology costs, and goes so far as to state that if the goal were to increase utilisation of pathology testing, one would be hard pressed to improve on the design of the current request forms. He points out that it has been demonstrated that elimination of 'tick boxes' with limited profiles will reduce utilisation without compromise to quality. Considering the magnitude of payments by medical schemes to pathology laboratories and assuming that a saving of only 5% could be achieved (he suggests that the saving could potentially be 15%), this could represent a saving to the industry of around R115 million, which would be available to fund more appropriate, and possibly new, technologies and drugs. Addressing the excessive and largely inappropriate utilisation of private pathology procedures in South Africa would be one way to initiate the process of more equitable and appropriate allocation of private health care resources and, as Pretorius points out, 'bring South Africa in line with other countries such as Australia that have already resolved these issues'.

A second paper, by Rothberg *et al.*,[3] reporting on a pilot study of screening for the early detection of abdominal aortic aneurysms, raises the question of the value of such screening programmes in well and asymptomatic people. In this study the authors showed that this was clearly not cost beneficial, adding significant costs with no demonstrable benefit.

Driven by the logic that prevention is better than cure and the assumption that prevention must therefore prove more cost beneficial, there has been a burgeoning increase of various screening programmes, all of which add substantial costs to a health care system. The cost benefit of most such programmes at a community or public health level has come under increasing scrutiny[4,5] and most have failed to show convincingly that the positive benefits, in terms of decreased mortality, justify the cost, or harm, of over-investigation, over-diagnosis and over-treatment. Even screening for cervical cancer in the First-World setting of the UK has shown that 1 000 women need to be screened for 35 years to prevent one death from cervical cancer.[5] Screening may well be more cost beneficial in South Africa, where the prevalence of cervical cancer is higher, but the cost benefit still ultimately depends on other factors such as quality assurance, resourcing and execution of such programmes.[6] More controversial is breast screening for lower-risk patients, and questions are being asked as to how much mortality benefit is added to such patients by regular mammography, over education and self-examination of the breast.[7] It is reported from the UK that the estimated number of patients aged 50 - 59 years needed to be screened with mammography to prevent one death from breast cancer was 2 451 for 5 years, with no significant benefit in total mortality. Screening younger women required even greater numbers to achieve the same.[8]

The decision about routine screening for cancer of the prostate using the prostate-specific antigen is easier, since the evidence for its not being cost beneficial is clear. There is no reliable evidence that early treatment improves outcome, and operative morbidity is unacceptable to well and otherwise healthy men.[4,9] However, this does not detract from the value

of this marker in other clinical settings, such as follow-up of both untreated and treated cases of prostate cancer.

Although for the individual patient, there is a degree of reassurance and comfort when negative results of screening tests are obtained, from a community or public health perspective, many of these programmes are difficult to justify on the grounds of cost, let alone the negative clinical impacts arising from false-negative tests, inappropriate treatments and their complications. The South African private health care system is undergoing restructuring along the principles of social health, with community rating, open access and mandated minimum benefits. In this setting, prioritisation of health benefits has to be considered from a social health or community perspective as well as from that of the individual. Treatments that add little value but increase costs should therefore receive a very low prioritisation. Wasteful practices, such as appear to be the case in the delivery of private pathology services in South Africa, should certainly be eliminated, but the funding of many preventive screening procedures should also be carefully evaluated before advocating widespread implementation and funding from mutual community funds. Reality confirms that the true cost of adding low-value services to the health care budget of a medical plan is borne by all patients who depend on a mutually common fund, either through denial of other benefits for certain patients or by increasing contributions and making the plan less affordable, especially to low-claiming and younger members.

D G Burns

Medscheme Health Risk Management

Corresponding author: *D G Burns (derrikb@solutio.co.za)*

1. Barrett A, Roques T, Small M, Smith RD. How much will herceptin really cost? *BMJ* 2006; 333: 1118-1120.
2. Pretorius C. Utilisation of pathology procedures in the South African private pathology sector between 2003 and 2005. *S Afr Med J* 2007; 97: 51-57 (this issue).
3. Rothberg AD, McLeod H, Walters L, Veller M. Screening for abdominal aortic aneurysm – a pilot study in six medical schemes. *S Afr Med J* 2007; 97: 58-62 (this issue).
4. Stewart-Brown S, Farmer A. Screening could seriously damage your health. *BMJ* 1997; 314: 533-534.
5. Raffle AE, Alden B, Quinn M, Babb PJ, Brett MT. Outcomes of screening to prevent cancer: analysis of cumulative incidence of cervical abnormality and modelling of cases and deaths prevented. *BMJ* 2003; 326: 901.
6. Hoffman M, Cooper D, Carrara H, *et al*. Limited Pap screening associated with reduced risk of cervical cancer in South Africa. *Int J Epidemiol* 2003; 32: 573-577.
7. Dent DM, Panieri E. Screening for breast cancer – finding a place between common sense and the evidence base. *S Afr Med J* 2004; 94: 354-355.
8. Rembold CM. Number needed to screen: development of a statistic for disease screening. *BMJ* 1998; 17: 307-312.
9. Walter LC, Bertenthal D, Lindquist K, Konety BR. PSA screening among elderly men with limited life expectancy. *JAMA* 2006; 296: 2336-2342.