

Reflections of ART policy and its implementation: Rebuilding the ship as we sail?

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Abstract

This paper reflects on the early experience with ART implementation in South Africa in the light of the policy goals of increasing ART access whilst improving prevention and strengthening the public health system. It reviews evidence on the state of ART roll-out and suggests that achievements to date have been significant, even if unevenly distributed and not meeting the set targets. The paper then considers what may be important future challenges - ensuring sustainable financing, addressing health system weaknesses (especially those related to human resources), building integrated systems of care and prevention, and developing appropriate national stewardship of the programme. Dealing with these challenges will be essential, both for building equitable ART access and leveraging wider benefits from the large investments in ART.

The decision by the South African government to make antiretroviral therapy (ART) universally accessible represents, from a budgetary point of view, one of the most significant social policies of the “post-transition” era.¹ It is the product of intense international and national pressure and as part of a wave of similar decisions in developing countries across the world.

The first tangible signs that government was considering wider ART access came in August 2003, when a Joint Health and Treasury Task Team presented its findings on the costs of such an initiative to Cabinet (NDoH 2003a). On the basis of this report, a new Task Team was mandated to draw up an implementation strategy for universal access to ART in the context of the existing state responses to HIV/AIDS. This team produced the *Operational Plan for Comprehensive HIV and AIDS Care, Management and Treatment for South Africa* (NDoH 2003b, hereafter referred to as the *Comprehensive Plan* or the *Comprehensive Programme*), which was approved by cabinet in November 2003. In April 2004, after a national site accreditation process, the public sector ART programme was formally launched.

¹ By “post transition” I mean the era following the first two terms of government (which could be regarded as post-apartheid or transitional), during which time the general features of the South African state, governance structures and processes of public policy-making were defined and consolidated.

Few would regard achieving universal access to ART for the more than 5 million people infected with HIV in South Africa as a simple task. ART is a socially and technically complex health intervention which requires not only that the public health system manage its current functions better, many of which are regarded to be in crisis, but also demands new kinds of performance from this system. Physical, cultural and economic barriers to access need to be overcome. On the health service side, life-long follow-up at high levels of adherence to triple therapy requires not only accessible and uninterrupted supplies of treatment, but also new approaches to the relationship between the health service and users. Significantly improving the survival prospects of people with HIV through better treatment will thus involve bureaucratic, service delivery and community shifts that are as considerable as the budgetary commitments that made ART access possible. While the *Comprehensive Plan* is a model of rationality and good intentions, its implementation is likely to be governed by difficulty, uncertainty and unpredictability. Recognising this intervention complexity but also the urgency of need, the World Health Organization has called for a process of “learning by doing”, of “rebuilding the ship [i.e. the health system] as we sail” (Bailey 2004).

Two years since its inception, what are we able to conclude on the *Comprehensive Programme*'s achievements, and what are the emerging issues that need to be confronted if implementation is to proceed as planned? Are there signs of a process of “learning by doing” and indeed of “rebuilding the ship as we sail”?

This paper reflects on the early implementation of the *Comprehensive Plan*, drawing on available documentary evidence (policy statements, reviews, commentaries and published literature) and analysing it from a health policy perspective. Health policy is concerned with

the courses of actions that affect the set of institutions, organisations, services, and funding arrangements of the health system. It goes beyond health services, however, and includes actions or intended actions by public, private and voluntary organisations that have an impact on health (Walt 1994: 41).

This definition views health policy as not only incorporating statements of intent, but also the implementation actions that do or do not arise from these intentions and the implicit or unwritten aspects of policy.

The paper begins by recapping the essential features of the *Comprehensive Plan* and summarises what is known about ART implementation. It then discusses a number of implementation themes – financing, health systems strengthening and stewardship – and draws conclusions regarding these that may be relevant for future implementation.

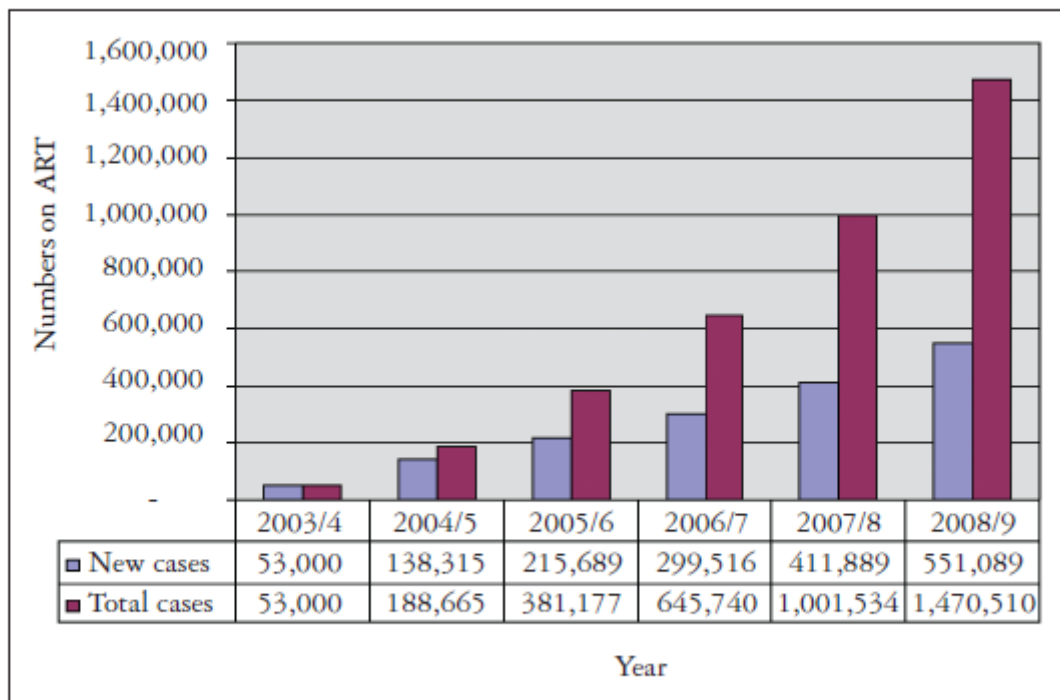
1. The *Comprehensive Plan*

The *Comprehensive Plan* has two central goals (NDoH 2003b:25): to provide comprehensive care and treatment for people living with HIV and AIDS, and to facilitate the strengthening of the national health system in South Africa.

With respect to the first of these goals, the *Plan* makes provision for scaling up a package of HIV/AIDS care towards universal access over five years. Specifically on ART, it envisages more or less exponential growth in access over five years starting with 53 000

people on treatment in year 1 (2003/4) and reaching 1.4 million by 2008/9 (Figure 1), where the target is 86% of new AIDS cases accessing ART (NDoH 2003b: 240). The *Plan* simultaneously provides a clear message of integration, placing ART in the continuum of care and seeking to ensure that investments strengthen the health system and prevention.

Figure 1: New patients starting and cumulative numbers on ART



Source: NDoH 2003b: 52.

The costs of the *Comprehensive Plan* were estimated to be 4.4 billion rand by 2007/8 (NDoH 2003b), representing a 10% increase over original Medium Term Expenditure Framework projections of total public health expenditure (not just for HIV/AIDS) for this period (Segall & Brijlal 2003). This denotes a significant increase in public health sector spending.

In many respects the *Comprehensive Plan* is exemplary.² It draws on international best practice, but speaks directly to national concerns and conditions; it has an equity orientation and a long-term vision of health systems; and it is comprehensive in scope. However, the ideal nature of the Plan hides the fact that it emerged from the intense controversies that have marked AIDS policy in post-apartheid South Africa. The *Plan* itself, while clearly enjoying the support of the government officials who wrote it, reflects political compromise rather than full social consensus – compromise between those who see HIV as a pre-eminent public policy and social challenge of the South African nation and those who seek to minimise its “exceptional” nature. A positive product of this tension is the *Plan’s* stated commitment to ring-fenced budgetary allocations for ART roll-out and clear targets (even if time frames are overambitious), while providing a strong message of integration and public health system strengthening. It is also reflected

² The Minister of Health was quoted as saying in a parliamentary briefing in February 2005: “Everywhere I go people tell me that our plan is the most wonderful they have ever seen” (health-e 21 February 2005).

in painstaking efforts by programme officials to establish a language of comprehensiveness, referring to the ‘CCMT Programme’ (the acronym of the *Comprehensive Plan*’s title) rather than ART roll-out or scale-up.

Definitive judgements on achievements in the implementation of the *Comprehensive Plan* are hampered by the lack of detailed and reliable information, part of a more general problem of data reporting across many spheres of government in South Africa (Barron *et al* 2005). However, over the last two years the Department of Health has provided global estimates of the numbers of people on ART. Detailed provincial breakdowns are also available for the early periods of implementation. By January 2005, a national total of 173 958 people had been assessed for, and 32 385 were receiving ART (Stewart & Loveday 2005). By April 2005 this had increased to 49 500 on ART (SA Government 2005) and in March 2006 the Minister of Health reported that “an accumulative number of people initiated on anti-retroviral therapy ... was more than 100 000 by December 2005” (NDoH 2006b: 1). This growth in numbers has been accompanied by an expansion of accredited ART sites, from 113 in April 2004 (NDoH 2004b) to 204 by December 2005 (NDoH 2006b). Over one year — April 2004 to March 2005 — the numbers of CD4 tests performed by the National Health Laboratory Service increased nearly four-fold, from 14 135 to 54 579 per month (SA Government 2005).

Independent assessments of the ART roll-out have been conducted on a regular basis by the Joint Civil Society Monitoring Forum (JCSMF).³ These involve sourcing of data directly from provincial governments and from the private sector. The JCSMF estimated that by August 2005, 76 000 people had been initiated on ART in the public sector (JCSMF 2005) rising to 111 000 by January 2006 (JCSMF 2006). A further 90 000 were estimated to be accessing ART through the private sector (JCSMF 2006).

The various assessments thus appear to provide the same overall estimates of growth in access to ART nationally. However, it is not always clear whether government figures (provincial or national) are the cumulative figures of those initiated on ART or those still on ART, and the figures may therefore be inflated estimates of those currently on treatment. The initial experience of highly active anti-retroviral therapy (HAART) programmes in developing countries is of a 6.4% mortality and a 15% loss to follow-up in the first year of treatment (ART-LINC & ART-CC 2006).

Notwithstanding the problems of accurate information, the evidence points to a rapidly expanding national ART access programme, that, if not reaching the targets set⁴ and still very far from meeting the need, is emerging as one of the largest globally.

Aggregate national figures, however, hide considerable provincial variation. In January 2005, eight months after the launch of the *Comprehensive Programme*, more than 85% of patients on ART were concentrated in four provinces (Gauteng, Western Cape, KwaZulu-Natal and Eastern Cape) (Stewart & Loveday 2005). The reasons for this

³ The Joint Civil Society Monitoring Forum was established in 2004 as a coalition of civil society organisations to monitor implementation of the *Comprehensive Plan*.

⁴ At the launch of the programme in April 2004, the original targets of the *Comprehensive Plan* were postponed by one year. The target for end March 2006 thus totals 188,665 on treatment. It is unlikely that this will be met.

variation stem in part from the quasi-federal nature of the South African health system and the latitude at provincial level to determine the pace of the programme, and in part from the distribution of HIV care initiatives prior to the start of the national roll-out. From 2001, in response to falling drug prices, ART sites as partnerships between nongovernmental role-players and local and provincial authorities emerged spontaneously across the country. A national census in early 2004 counted a total of 39 ART projects, covering five provinces (most notably Western Cape, Gauteng and Kwazulu-Natal) and treating close to 4 000 people (Poole and Stewart 2004). The most well-known is the *Médecins sans Frontières* (MSF) project in Khayelitsha, Cape Town, which has played a significant role, with similar initiatives in other parts of the world, in shaping national and global public opinion on ART. When the roll-out was formally announced, these original ART sites had the support, systems and confidence to “hit the ground running”, not only increasing numbers in their own sites, but also supporting roll-out in a second generation of sites.⁵ In the Free State, Limpopo, Mpumalanga provinces, where roll-out was initiated largely through new public sector sites without extensive prior non-governmental involvement and partnerships, the numbers on ART were much lower in the initial phases of roll-out and continue to be low (JCSMF 2006).

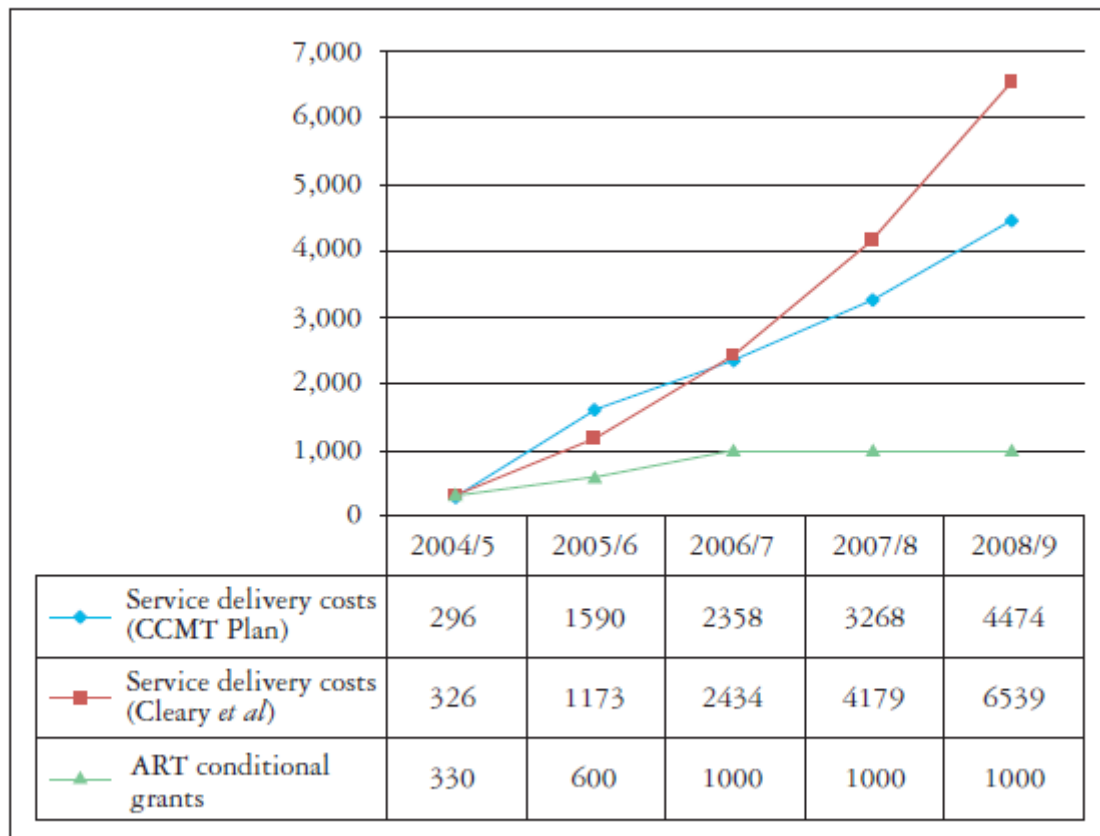
Even in the seemingly more successful provinces, the growth in numbers to date represents the mobilisation of an extraordinary number and range of people, energy and attention, referred to by one of the actors involved as “sweating blood” (personal communication, Dr Francois Venter). There are several reasons to suggest that the momentum achieved so far may be difficult to sustain. Firstly, as the programme becomes larger and more complex (for example, as people need second line ART drugs and the marginal costs of enrolling new cases increase), the overall programme costs will rise. In the face of this, there may be less willingness to continue increasing conditional grants for HIV/AIDS, evident over the last five years. Secondly, all would acknowledge that the roll-out will become increasingly difficult as it begins to depend less on exceptional sites led by champions than on the routine institutional environment, where motivated and well managed teams in adequately resourced facilities are hard to find. With time, the pattern of the roll-out will in all likelihood begin to mirror broader health system weaknesses. It is not clear that ART implementation processes are currently oriented to creating wider systems benefits or leveraging a more comprehensive approach to HIV/AIDS. Thirdly, a low-key style of national management or ‘stewardship’ of the programme, shaped on the one hand by the ongoing difficulty of role definition and co-ordination between spheres of government, and on the other hand, by the failure of senior political leaders to fully embrace the programme, may turn out to be a significant brake on progress. Each of these factors will be discussed in turn.

2. Sustainable financing

Increased national spending and the massive mobilisations of funds globally for HIV/AIDS can easily create the impression that sustainable financing is not a major obstacle to universal ART access in a middleincome country such as South Africa. With time, however, this assumption may prove incorrect.

⁵ The North-West province, for example, has benefited from networks and partnerships with experienced sites in Gauteng province.

Figure 2: Projections on expenditure and costs of the *Comprehensive Plan* (2003/04 prices)



Source: Cleary *et al* 2005

Figure 2 provides three projections:

- Costs as estimated in the *Comprehensive Plan* (service delivery costs, CCMT Plan), assuming coverage targets are met as planned
- More recent service delivery costs drawn from actual programme experience including the unit costs of drugs obtained through tendering, also assuming coverage targets, are met as planned (Cleary *et al* 2005)
- Treasury projections for the *Comprehensive Plan* (ART conditional grants).

These projections show that the anticipated expenditure (Treasury ART conditional grants) is considerably lower than the estimates of the actual costs of service delivery. This is of concern especially since the projections in the *Comprehensive Plan* may themselves be under-estimates of the real costs. Lower allocations by Treasury may not be inappropriate in the initial phases of the programme, since the pace of the roll-out has been lower than the targets set. However, it is not clear whether Treasury will revise its projections upwards as the roll-out proceeds, especially since the revised estimates of the programme costs are higher than originally thought.

The divergence between modelled needs and projected allocations may represent realism in the face of historically low absorptive capacities in provincial governments of special or “conditional” grants. Alternatively it may reflect an unwillingness to increase the core

funds for the health system through the more general equitable share, and a belief that demand for ART is likely to be lower than anticipated with an implicit acceptance of coverage below the targets of the *Comprehensive Plan*. It is indeed very possible that the demand for ART will be less than projected, despite the provision of services. Stigma and contested social meanings surrounding HIV, combined with the costs incurred in accessing facilities, are likely to be important barriers to uptake. The international experience with such access barriers is that they establish highly inequitable patterns of utilisation, where the poorest receive a disproportionately smaller share of new resources, despite having greater need (Castro-Leal *et al* 2000). Sustaining financial momentum for successful implementation, particularly where this requires investment in strengthening health systems and reducing access barriers, may thus become an important challenge in the next few years. Addressing this challenge will depend, in turn, on the extent to which the political and popular momentum in favour of the policy can be sustained, an issue dealt with further in this paper.

3. Health system strengthening

Health system weaknesses include insufficient resources, in particular human resources, and the poorly developed chronic disease care systems and integrated approaches to HIV/AIDS care and prevention at district level.

3.1 Human resource constraints

The inadequate supply of skilled health care workers is now viewed as the central systems constraint to scale up both locally and internationally.⁶ HIV care requires a complex mix of capabilities, from community awareness and mobilisation to enhanced monitoring of drug supplies and specialist medical care. With time, HIV care including ART should increasingly become centred on the primary health care infrastructure, in alliance with community organisations, and supported by medical and district management systems (Farmer *et al* 2001, *Médecins sans Frontières et al* 2003). However, even if the training and systems were available to facilitate this, South Africa is facing a growing crisis in the supply of professionals that is not only directly impacting on the ability to recruit staff to the programme, but also creating a more general experience of reversal or weakening in the public health system. Over a seven-year period between 1996 and 2003, the availability of doctors and professional nurses in South African provincial health structures declined by 24% and 16% respectively (Table 2). By 2005 there was a shortage of nearly 46 000 trained personnel in the health system, representing a 27.1% vacancy rate (Day & Gray 2005: 317). Yet the *Comprehensive Plan* estimated that just under 14 000 additional staff were required in South Africa to reach the targets set, of which just over 6 000 would be health professionals (doctors, nurses, dieticians and pharmacists) (NDoH 2003b).

⁶ Cf Barron 2003, Hongoro & McPake 2003, Chen & Hanvoravongchai 2004, Kober & Van Damme 2004, Sanders & Lloyd 2005.

Table 2: Supply of health professionals working in provincial health services and percentage decline: 1996-2003

Category	1996	2003	% decrease
	per 100,000 non-insured population		
Doctors	36.6	27.8	- 24
Professional nurses	128.2	108.2	- 16

Source: Segall & Brijlal 2003

Loss of health professionals through emigration, in particular doctors, is not a new phenomenon in South Africa or the rest of the world. It has, however, assumed an accelerated pace in recent years, driven by a constellation of push and pull factors, and currently affecting nurses in particular (Padarath *et al* [s a], Lehmann & Sanders 2004). The effects of this are not just absolute shortages, but also a high turnover of personnel and loss of institutional memory. The production of nurses has not kept pace with the losses (Subedar 2005), and the human resource crisis is now high on government's policy agenda (NDoH 2005).

It is important to point out that while accounts of unfilled staff establishments are near universal, the actual experience of the human resource crisis varies enormously, reflecting what the Pick Commission (2001:1) some years ago referred to as "complex distortions of supply, production, distribution and development of health personnel". These distortions are evident in different human resource situations across provinces, but also within provinces from area to area. In a recent study of nursing staff dynamics in the maternal health services of three provinces (Limpopo, Mpumalanga and KwaZulu-Natal), Penn-Kekana *et al* (2005: i) found large facility variations in percentages of filled professional posts, and moreover, concluded that "although nursing staff turnover, shortages of staff and workload are particular problems at some facilities, they are not as serious as has been previously suggested".

A less tangible but no less significant dimension of the growing human resource crisis is the demoralisation and de-motivation of those remaining in the system. Of the 147 professional nurses working in maternal health services in three provinces surveyed by Penn-Kekana *et al* (2005: 25), 60% reported feeling de-motivated and 51% agreed with the statement: "I could see myself working overseas in the future". Poor motivation was significantly associated with perceptions of poor pay or promotion prospects, feeling unsupported by management and workplace conflict. Gilson *et al* (2004) came to similar conclusions in their in-depth qualitative study of nurses in rural clinics, who viewed their managers and the health care system as their employer with considerable mistrust.

De-motivated health workers are less inclined to orient their actions towards the achievement of organisational goals and to balance selfinterested behaviour with altruism and solidarity towards users of services (Franco *et al* 2002). Public sector health workers in South Africa are frequently described as harsh, unsympathetic and as readily breaching

patient confidentiality (Modiba *et al* 2002, Gilson *et al* 2005). In the context of HIV treatment scale-up, these entrenched norms of service delivery limit the ability to create individualised, patient-centred therapeutic partnerships premised on rights and equality between providers and patients. Inappropriate or harmful service delivery and managerial cultures may ultimately be more important structural constraints to the implementation of the *Comprehensive Plan* than the lack of supply of health workers.

Interestingly, the AIDS field does offer opportunities with respect to both supply of personnel and local cultures of care, in the form of a large HIV/AIDS community-based care and support infrastructure that has emerged across the country over the last five years. It is made up of a mix of lay counsellors and ART treatment supporters, homebased carers and support group facilitators, managed through NGOs, but whose activities are largely funded by the state. In 2004, the Department of Health released a National Community Health Worker Policy Framework to regulate this emerging sector, estimated to constitute more than 60 000 volunteers of whom just under 20 000 received some form of stipend in 2004 (Friedman 2005). The *Comprehensive Plan* envisages extensive reliance on lay counsellors and community health workers — 45% of new staff fall within these categories.

Apart from constituting a *de facto* workforce presence in the health sector, lay involvement in HIV/AIDS operates in the interface between communities and the health system, and that between providers and users, and has the potential to positively shape this interface. Lay workers, and the NGOs and CBOs they belong to, are able to develop rightsbased discourses and to network with broader social movements. The local activities of the Treatment Action Campaign (TAC) in sites such as Khayelitsha and Lusikisiki offer not only positive social identities for people with HIV/AIDS, but also concrete and powerful role models of new relationships between communities and the public health service. They are an important source of bottom-up change, although harnessing this opportunity is constrained by ongoing and unresolved tension between AIDS activists and government. Community-based care and support is also not without its problems and contradictions, in many places existing as a passive and poorly resourced extension of the formal health system.

3.2 Building chronic disease care capacity

From a systems perspective, the closest analogy to ART provision is TB care. In addition to the obvious fact of a large overlap in the populations requiring ART and TB care, ART provision shares many of the well-known challenges of TB control — ensuring follow-up and adherence to complex drug regimens, significant risks of drug resistance, and a rapid increase in numbers over the last years.⁷ Yet South Africa has had enormous difficulty getting on top of its TB epidemic — in 2002, 68% of new smear positive TB cases completed treatment, 22% were lost to follow-up and 9% died (SA Government 2005). In February 2005, the Minister of Health acknowledged in a parliamentary briefing that “In spite of DOTS, we do not seem to be succeeding” (health-e 21/02/2005). Failures around TB provide a warning regarding the challenges likely to face the roll-out of ART, even though failure should not be seen as inevitable. For example, Tanzania and Mozambique,

⁷ HIV has the added complexity, of course, of requiring lifelong treatment.

low income countries in southern Africa with serious HIV epidemics, have effective TB programmes (WHO 2005).

In contrast to other disease programmes, the roll-out of ART has the benefit of a varied and growing body of on-the-ground experience of implementation nationally and internationally, upon which to build. Several projects, notably those of MSF, Partners in Health in Haiti, and national programmes such as that of Botswana, are well documented success stories, demonstrating good outcomes with respect to followup, adherence and survival in low-resource settings (Farmer *et al* 2001, Kemp *et al* 2003, Coetzee *et al* 2004, Masa 2004). They offer important lessons. The first is that successful ART programmes are part of a comprehensive approach, combining public health, clinical and communitybased activities integrated into a 'continuum' of care, support and prevention. These ART programmes are also supported by a relatively complex human resource mix of medical and nursing staff, laboratory personnel, lay counsellors, community health workers or treatment supporters and local programme managers.

In addition, the projects:

- pay attention to the development of appropriate service delivery systems – standardised treatment protocols, patient flow, adherence management, patient and programme monitoring;
- invest in support systems such as drug supplies, laboratory and supervision;
- establish clear referral systems between community, primary health care and hospital facilities;
- work in partnership with non-governmental and community-based organisations;
- seek to shift from authoritarian to patient-centred forms of care;
- adopt a building blocks approach to implementation that includes establishing wellness services for HIV as a first step.

Good ART outcomes are the result of far more than single purpose vertical programmes. Apart from the difficulty of maintaining people in life-long treatment, one of the biggest challenges to the success of ART is testing and enrolling people into care, ideally early in the course of their illness, so that they are able to come to terms with the diagnosis and start treatment while chances of success are high.

Building a population of 'ready users' implies a degree of destigmatisation of HIV and widespread willingness to test and attend facilities for treatment. This in turn presupposes what Campbell *et al* (2005) refer to as "community AIDS competence". AIDS-competent communities are able to discuss AIDS knowledgeably; they openly own the problem and believe themselves capable of responding effectively to it. As recognized in national policy, if it is to reach the numbers who require it, ART provision cannot be viewed separately from HIV care and prevention more generally. This needs to be matched on the supply side by accessible care, patient involvement and the necessary referral, technical support, outreach and monitoring systems. These systems and processes, common to all chronic disease care, are by nature design heavy and require particular orientations to service delivery, to the patient-provider relationship and to management (Bodenheimer *et al* 2002).

Taking heed of the lessons of successful HIV pilot projects, and institutionalising them in the health system as a whole, is thus not a straightforward process. Trust in health systems and in providers is at best fragile (Gilson *et al* 2005) and health systems are poorly oriented towards chronic disease care. Building capacity for effective HIV care rests on a combination of activities, from standardised protocols and procurement systems at national level, to good technical support at provincial level, and the development of integrated local networks of prevention and care locally. These processes require distinct roles for each sphere of government, that span from mobilising resources nationally to managing integrated delivery systems at district level. While this degree of mobilisation may seem unduly ambitious, the failure to recognize and deal with these health system challenges to date, underlies the disappointing performance of health programmes more generally, whether TB control (Van Rensburg *et al* 2005) or care for non-communicable diseases such as diabetes and hypertension.

To what extent are these processes evident in the implementation of the *Comprehensive Plan*? At a national level there is clear exercise of responsibility in mobilising resources and creating the necessary standardized systems for the *Comprehensive Plan*. These include national treatment guidelines, organising a laboratory infrastructure through the National Health Laboratory Service, procuring drugs and ensuring financing of the *Plan*. Indicators for programme monitoring have been designed with the view to integrating them in the well-established district health information system (NDoH 2004a). The national Department of Health also undertook the initial accreditation of sites for roll-out (NDoH 2004b).

The evolution of the programme appears most dependent on the nature and degree of uptake by provincial authorities. The decision-making ‘space’ claimed by provincial programmes has varied considerably, some following national cues and others taking a much more proactive role with respect to the pace of roll-out and the design of new systems. Across all provinces, however, the Programme appears to involve little active definition of local or district roles, and programme governance has largely bypassed district authorities. This absence suggests a broader style of policy implementation that, at this stage, involves vertical resourcing of the roll-out sites as its principal strategy, without too much focus on the nature of practice in the sites themselves, or on broader systems change. This is evident in two current weaknesses in the implementation process. They are the lack of adequate monitoring and evaluation (M&E) systems and processes at all levels, starting at the point of service delivery, and the lack of integration of ART into other HIV activities, and into the health system more generally, despite the stated intentions of the *Comprehensive Plan*.

At the core of any chronic disease care system is information. Maintaining the quality of a follow-up service hinges fundamentally on the ability to collect, collate and analyse real-time information, as does programme accountability. It is central to “learning by doing” across all levels of the system (Bailey 2004). While a comprehensive framework and indicators have been developed for the monitoring and evaluation of the *Comprehensive Programme*, its operationalisation has yet to be achieved. This problem has been

acknowledged by a number of roleplayers (Stewart & Loveday 2005).⁸ It is especially evident at the level of service provision where simple and standardised approaches to individual patient and facility monitoring (analogous to the TB register) are either absent, or rely on systems developed locally or provincially. Early attempts at lengthy form filling rapidly emerged as unrealistic and were resisted in many sites. These have been replaced by national plans to establish general electronic patient monitoring systems. In the meantime, provinces are filling this gap in various ways and national information on the roll-out remains limited.

It is necessary to point out that information systems on their own do not guarantee the use of information in productive ways. Even if a patient monitoring system was in place, it is very likely that those collecting the information would not have the skills to analyse the data, nor would they see the value of doing so. The culture of monitoring and evaluation at facility as well as sub-district and district levels is poorly developed in the health system. Building this culture is a core challenge of the roll-out process and will require direct support to facilities and strengthening of managerial capacity at sub-district and district levels.

Expansion of HIV/AIDS programme activities, often tied to ringfenced conditional grants from national government, has resulted in rapid ‘stacking up’ of interventions without adequate integration between these activities. Over a few years, programmes to increase voluntary counselling and testing (VCT) and home-based care coverage, were followed by the prevention of mother-to-child-transmission (PMTCT) and post exposure prophylaxis (PEP) programmes, and then the rollout of ART all emerged in rapid sequence. At facility level these various functions have often ended up as vertical activities separate from each other and from other health care, let alone other sectors involved in addressing HIV/AIDS. This is also reflected in the piece-meal evolution of lay workers linked to different activities with often overlapping functions (Friedman 2005). This problem of verticalisation is compounded by the fact that many of the initial ART sites were singlepurpose HIV clinics, based in hospitals with few linkages to the other largely PHC-based HIV/AIDS activities. This has clear implications for efficiency (in the duplication of activity) as well as for the ability to provide a co-ordinated district-based continuum of HIV prevention and for care activities targeting coherent populations. It also limits the ability to transfer lessons learnt from HIV to TB and other chronic diseases.

Consequently there is a danger that the implementation of the *Comprehensive Plan* in its current form is not addressing health systems’ weaknesses, and that it may even be introducing new distortions, such as in the distribution of health personnel and managerial attention. It is also not clear whether resources mobilised are creating prevention spinoffs. The Department of Health recently reported gains in access to both VCT and PMTCT. In the period 2003/4 to December 2005, facilities offering VCT increased from 64% to 88%, and facilities offering PMTCT increased from 41% to 77% (NDoH 2006c: 6). There are also anecdotal reports of a significant uptake in VCT in

⁸ In a recent report, the Department of Health acknowledged that in respect of ART “the patient monitoring system is not yet able to collect information [...] in a reliable manner” (NDoH 2006a: 26).

response to the knowledge of ART programme, particularly in urban areas.⁹ Other evidence suggests that the response to HIV nationally is marked by high and possibly growing levels of inequity. For example, in 2004 HIV testing rates in pregnant women varied from less than 20% in Mpumalanga and Northern Cape to over 80% in the Western Cape and KwaZulu-Natal (Barron *et al* 2005). Follow-up rates of children in the PMTCT programme are still “very low” (NDoH 2006a: 39).

4. Stewardship

The extent to which the *Comprehensive Programme* is able to address the many challenges associated with its implementation depends on the nature of ‘stewardship’ or leadership of the Programme. WHO refers to ‘stewardship’ as the function of “ensuring oversight, regulation, and accountability of all actors involved in ... health system functions” (Travis *et al* 2003: 290). It is concerned with both what health systems do, and how these are done — the implementation strategies or processes adopted (Travis *et al* 2003). Stewardship happens throughout the health system and not just nationally.

The stewardship of the *Comprehensive Programme* has as its major task to ensure progress towards targets, while simultaneously tackling the systemic conditions for achieving universal access, *i e* rebuilding the ship as it sails. It necessitates the difficult bringing together of programmatic and systems thinking, without too many successful precedents of this nationally or globally (Collins *et al* 2002). In South Africa this is made especially complex by the fact that the *Programme* is being implemented at the end of ten years of reform, and in a context of ongoing political ambivalence towards HIV/AIDS and ART.

Since 1994, the public health system has been assailed by an array of initiatives, both programmatic and systemic. It is an environment of “overloaded policy mandates” (*Business Report*, 13 July 2005) and “transformation fatigue” (McIntyre & Klugman 2003), where before one change can be properly institutionalised, attention is diverted to the next. This is especially true of the HIV/AIDS programme where new activities have been introduced on an almost yearly basis. The consequence of this is an inability to prioritise, a loss of focus, and an implementation of a culture of “muddling through” (Stone 2001).¹⁰ This style of implementation is oriented to meeting short-term organisational and political demands, and leads to outcomes in certain places and at certain times, but not to the kind of wide-scale and focused change required to meet, for example, the goals of the *Comprehensive Plan*. Muddling through, and the disjointed incrementalism it gives rise to, have characterised the implementation of many post-apartheid health reforms, including the abortion policy, DOTS for TB or the district health system.

⁹ For example, the number of VCT clients in Ekurhuleni Metropolitan area increased from 1 800 in the last quarter of 2003, to nearly 5 000 in the first quarter of 2005 (Kellerman 2005)

¹⁰ Stone (2001: 6) describes muddling through as follows: “Civil servants and politicians are entirely pragmatic, aiming to ensure that government can function, cope with pressure group demands and deal with crises as they arise. Pragmatism in policy-making tends towards the avoidance of costly innovation or departures from routine practice [...] Researchers are consequently are likely to be sidelined”. It “reinforce[s] pro-inertia and anti-innovation forces; there is low emphasis on developing clear goals and plans; difficult problems requiring radical changes to resolve are ignored”.

A national stewardship function would ideally capitalise on the opportunities offered by the *Comprehensive Programme*, ensuring a more general fashioning and communication of a consolidated and refocused perspective on the transformation effort in the health system more generally.

However, this has been made very difficult by the ongoing political ambivalence towards HIV/AIDS, to ART and therefore to the *Programme* itself. Consensus on a core set of “facts” regarding HIV/AIDS in South Africa — the extent of the epidemic and appropriate individual and collective responses to it — remains elusive. AIDS is still a divisive subject, unable to stand above and separate from prevailing national political tensions. As a result, national politicians in South Africa have either steered clear of public commentary on the *Comprehensive Plan*, or even opened it to some degree of ridicule.¹¹ This contrasts with the political consensus surrounding Botswana’s “Masa” or “New Dawn” programme. It represents people taking ART as entitled and responsible modern citizens and its

“vision” is hope for Botswana to live longer, healthier lives by providing people living with HIV/AIDS with valuable time to nurture their families and build a better future for the nation and all its people (www.gov.bw/government/ministry_of_health.html#masa).

Organisationally, the *Comprehensive Programme* implementation structures in the national health department involve a small central unit in the HIV and AIDS/STI/TB Chief Directorate, co-ordinating a series of players across the other sections of the department, rather than a high profile central unit. While this has systemic and mainstreaming benefits, the net effect of these political and organisational dynamics is one of low-key stewardship at national level. This certainly involves steady core processes (such as financing and procurement) but is occurring largely behind closed doors, with little public scrutiny or participation, and hampered by weak monitoring and evaluation systems. Open and easy discussion of HIV/AIDS within government is difficult and the room for manoeuvre by programme implementers is narrow. These conditions are the opposite of those generally regarded as the bases of organisational “learning by doing” (Argyris & Schön 1978).

Yet interestingly, despite this environment, achievements in the comprehensive programme to date suggest that the shifts being achieved are more radical than simply “muddling through”. These gains are the product of a sub-national or bottom-up process of stewardship that has characterised AIDS policy more generally over the last few years. The opportunity to finally address the overwhelming reality of HIV/AIDS illness and death through ART has mobilised an unusual degree of attention at all levels of the health system, giving rise to independent responses in several provinces and numerous local initiatives. A wide range of players have been involved — they include faith-based, nongovernmental and academic “champions” working in partnership with local or provincial authorities. Many began projects prior to the official launch of the roll-out and were part of the Generic Antiretroviral Procurement Project (GARPP), which met on a regular basis to share experiences and consider common needs (Poole & Stewart 2004). It is also manifest in the presence of formal networks such as the Enhancing Care Initiative (2004) in KwaZulu-Natal, the Institute for Healthcare Improvement’s Collaborative Improvement Model in five provinces (Barker 2005), research partnerships in the Free

¹¹ For example, through association with the Dr Rath Foundation that has promoted high dose vitamins as an alternative treatment for HIV/AIDS.

State Province (Doherty *et al* 2004) and many other small scale and informal collaborations. This bottom-up process involves the successful meeting of formal hierarchies, able to mobilise resources and institute systems, with more informal horizontal processes of networking and lesson transfer. In other words, at sub-national levels the roll-out of ART has involved productive relationships between health system managers and a broad range of knowledgeable actors inside and outside of government (including experienced providers, researchers, NGOs and activists). These alliances often include processes of evaluation and critical reflection and constitute a mechanism for “learning by doing”.

5. Conclusions

As a policy statement, the *Comprehensive Plan* resembles many of the policies of the immediate post-apartheid era in its comprehensiveness and transformational intent. It has the added benefit of having ring-fenced budgetary commitments for its implementation. This enabling policy framework, combined with a powerful bottom-up response and effective resource mobilisation, has been sufficient, it appears, to catalyse a roll-out process in South Africa.

This paper has highlighted what might be important considerations to further roll-out and to meeting the objective of health systems strengthening. First, despite the intentions of and opportunities created by the Programme, the process is unfolding unevenly across the country. There is the danger that in the absence of strong national stewardship, the programme will continue to expand in an uneven manner, between and within provinces, effectively “scaling up inequalities” (Egger *et al* 2005). This has already been documented for other HIV interventions (VCT, PMTCT, etc) that preceded ART (Scott *et al* 2005, Barron *et al* 2005) and is likely to become increasingly evident as ART roll-out proceeds. In the parts of the country where poorly developed district structures and weak managerial ability combine with poor human resource supply, difficulties can be anticipated. In such contexts, the ability to benefit from additional resources made available by the *Comprehensive Plan* will be limited, and will require a far more holistic approach to building capacity.

Second, in the drive to respond to the considerable social and political pressures to achieve targets, implementation has also tended to be vertical in nature, poorly integrated into other HIV/AIDS activities, and into the health system more generally.

Addressing these challenges depends on the extent to which the *Comprehensive Programme* is able to become more firmly part of national health systems development (*eg* dealing with the human resource shortages) on the one hand, and integrated into comprehensive local approaches on the other. The strengthening of integrated local/district HIV/AIDS/TB/STI (“HAST”) programmes, with clearly defined roles and responsibilities and decentralised authority, supported by integrated monitoring and evaluation systems, is clearly a priority. Over the long term, maintaining policy momentum towards programme goals will require sustained financial commitment and political support.

The health system and the response to HIV to date are not without their strengths, sources of innovation and opportunities. Making use of these requires recognition of the importance of building a broadbased, bottom-up and participatory approach to implementation. Strategies that promote debate, discussion and exchanges are more likely to achieve systems learning and diffusion of knowledge than processes that are closed and conflicted. Ultimately, implementation has to be seen as a strategic endeavour in and of itself, a complex mix of coalitions, learning, political symbolism and control (Lane 1987), that draws from, but goes beyond what is outlined in policies and plans. However, without more high profile and unambiguous national stewardship of the Programme, it is hard to see how the huge challenges can be confronted and the many opportunities harnessed into a “massive national response to match the scale of the pandemic” (Mametja 2005).

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