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OFFICIAL GOVERNMENT JUSTIFICATIONS AND PUBLIC ARV PROVISION: A COMPARISON OF BRAZIL, THAILAND AND SOUTH AFRICA

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Introduction: ARVs in a global context

The 2001 Doha Declaration of the World Trade Organisation (WTO) confirmed the right of countries to override patents in the interest of public health (Ford, et al., 2007). Later resolutions from the WTO as well as from the United Nations (UN) reflected the emerging consensus that medicines required to treat pandemic illnesses are a basic human right (Galvao, 2005). International assistance with regard to the public provision of antiretroviral drugs (ARVs) has been closely associated with this shift, resulting in a new hope for the widespread treatment of AIDS. ARV drugs themselves have also undergone substantial technical development. Simpler, combined dosage formats and a greater range of suitable medications provide more options for short-course interventions (to prevent the transmission of HIV from mother to child) and for long-term treatment of AIDS with highly active antiretroviral therapy (HAART).

The sharp drop in the price of ARVs since 2000 (through better manufacturing methods, negotiated drug deals and competition from generic producers) has helped made the goal of universal access to ARVs more economically feasible. However, providing HAART in the public sector remains a substantial long-term commitment which middle- and lower- income governments may find particularly challenging given other developmental demands on their scarce resources. The decision to provide ARVs through the public sector requires a balance of various fiscal, political and humanitarian considerations. Unsurprisingly, even countries with similar income levels differ in their levels of ARV provision, suggesting that economic factors are not the only variables involved.

What might account for these differences? Nattrass (2006) notes that once healthcare capacity, income and other resource considerations are taken into account, countries such as Uganda, Brazil and Thailand provided higher levels of HAART coverage than expected. These countries are well known for their proactive and effective HIV/AIDS policies and for displaying strong government involvement in prevention and treatment. On the other hand,

countries renowned for their lack of commitment on the issue – South Africa, Zimbabwe and Tanzania – had lower HAART coverage than expected given their resource levels and institutional characteristics. Nattrass suggests that the residual amount of over- or under-performance is probably picking up unmeasured aspects of 'political will' on the part of governments to treat their AIDS-sick citizens.

This paper explores this possibility by considering the impact that senior government officials have on policies relating to the state provision of ARV drugs. An initial discussion of 'leadership' and AIDS is followed by a phase analysis of ARV provision policy in three cases: Brazil, Thailand and South Africa. The purpose of this analysis is to identify any similarities in the experiences of these countries in providing HAART to their citizens.

AIDS, leadership and ARVs

Uganda is widely cited as a model of senior-level political commitment to HIV/AIDS – particularly with regard to President Museveni's public statements which have been credited with helping lessen the degree of HIV related stigma (Green, 2003). Brazil is another poster-child for government involvement, with free access to HAART being guaranteed by government for all AIDS-sick people. In stark contrast, South African and Russian leaders have been criticised for not tackling the epidemic head on – and in the case of South Africa, actually sewing confusion about HIV and AIDS treatment (Nattrass, 2007). However, what exactly constitutes 'good AIDS leadership' is still widely debated (Parkhurst & Lush, 2004). Patterson (2001) notes that a vocal and powerful leader, such as Ugandan President Museveni, may seem an attractive model, but has the potential to push through dangerous or only short-term policies. Furthermore, political commitment surely means more than just vocal statements, such as a willingness to actually mobilise resources rather than simply identify with the problem (Schneider, 1998).

Statements by political leaders are important symbolically – because they alert people to what their leaders consider to be the key priorities, threats and opportunities. But they are also important politically because they orient government policy in certain directions and define the limits for what options are considered to be legitimate policy actions. In the case of HIV/AIDS, statements by political leaders might delineate who has the right to talk about AIDS and define the problem, what options may be debated, and what options are actually on the table for implementation. Most importantly, they define and

reflect the government's 'policy logic' and shape the trajectory of AIDS policy over time.

I will argue that the justifications that leaders employ for a given policy stance constrain the actions they subsequently take when progressing to a different policy phase. For example, if a government uses a philosophical justification for not expanding a particular public service, then it will not go about trying to reduce costs of such a system for future implementation, because the option of implementing it is not on the table. If the choice had been justified on a cost basis – that is, sufficient public funds were deemed unavailable for implementation – the government *would* go about trying to lower costs in the hope of future implementation. It is in this manner that policy phases follow logically on from one another

I will examine this policy logic with regard to the provision of ARV drugs in the public sector by means of three country case studies. I will argue that the way in which governments justify their choice of policies, either favouring or reducing provision, determines their later transition to a new policy position. In essence, Brazil and Thailand initially accepted the need for ARVs, but then were forced for economic reasons to delay using them until they were able to take other measures to bring down the price of ARVs. South Africa, by contrast, initially accepted the need for ARVs, but when President Mbeki came to power in 1999, the policy logic shifted from an acceptance of ARVs to one of questioning the science of AIDS pathogenesis and treatment. This policy logic did not lead to actions to reduce the price of ARVs and South Africa ended up with a delayed ARV rollout.

Case studies

The country case studies provide a means of exploring the link between leaders' justifications and policy outcomes regarding ARV provision. Three countries are considered: Brazil, Thailand and South Africa. Each of these countries ultimately opted to provide HAART in the public sector, but they did so at different times and under different conditions. Brazil and Thailand, which adopted universal access to HAART in 1996 and 2003 respectively, followed relatively similar policy processes to get to the point of rolling out HAART. South Africa has had a different, and more hostile, experience of provision – and this has been a consequence of its own, particular internally consistent policy logic.

These cases were chosen for their obvious differences (Brazil and Thailand are considered models of good AIDS governance, while South Africa is not) and for their similarities. All three are middle-income, AIDS affected countries with relatively high levels of civil society involvement and activism, and all currently provide HAART through the public sector. It is in countries such as these that the alignment of government and civil society goals are most pertinent in terms of policy outcomes. Although not identical in income (see Table 1), South Africa and Brazil have very high disparities in wealth distribution, as is illustrated by their respective Gini coefficients. Public sector provision is thus targeted at citizens of a similar low-income level to that in Thailand.

Table 1. Key country indicators (2006)

	Brazil	Thailand	South Africa
Population	188.7 million	64.7 million	47.4 million
GNI per capita	$4,730	$2,990	$5,390
Gini coefficient	57.0 (rank: 70th)	42.0 (rank: 78th)	57.8 (rank: 121st)
HIV prevalence (adults aged 15-49)	0.5%	1.4%	18.8%
Total PLWHA	620 000	580 000	5.5 million
Pregnant HIV+ women receiving ARVs for MTCTP	57.6%	30.6%	14.6%
PLWHA receiving ARV therapy	N/A	60.0%	21.0%

(Source: UNAIDS, 2006; World Bank, 2006; UNDP, 2007)

Importantly, pharmaceutical companies still consider the markets of these countries to be of a sufficient size to warrant the strict protection of their patents (Attaran, 2004). As a result, all three countries are usually excluded from differential pricing deals offered to groups of lower-income countries. Moreover, they are often subject to bilateral pressure to increase patent protection because they have reasonably sized manufacturing sectors (Ford, et al., 2007). All three governments have become compliant with WTO's Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement (Brazil in 1997, Thailand in 1992 and South Africa in 1994). This provides them with some flexibility, especially with regard to the issuing of compulsory licences for essential medicines. Nevertheless, all three countries have experienced strong pressure from major governments to limit their use of this flexibility (Dionisio, et al., 2006). Brazil and Thailand (and for a short time, also South Africa) resisted this pressure and used legal frameworks for the use of TRIPS flexibility, creating possibilities for domestic production and generic importation.

There are, of course, many differences between these countries. Most obviously, the absolute number of HIV cases in South Africa outweighs the other countries by over 4.5 million infections. This constitutes a massive difference in the resources required to provide universal access. The political transitions experienced also varied. Yet, as discussed below, it is interesting to note that the countries went through similar policy phases, although there is variation in the second phase in the case of South Africa.

Three distinct policy phases can be discerned: 1) the introduction of ARVs for mother to child transmission prevention (MTCTP) and consideration of the possibility of providing HAART; 2) confronting the direct cost implications of using ARVs and associated attempts to bring down prices; and 3) commitment to expanded access to HAART.

The first discernible phase is the inclusion of any ARVs as part of a policy response to HIV/AIDS. Although full HAART would only become a treatment option at a later stage, the use of short course ARV treatment for MTCTP was considered during the initial phases of AIDS policy in all three cases (and ARV monotherapy was considered in Brazil and Thailand).

A second policy phase can be identified when governments confront the costs of ARVs. Providing ARVs through the public sector can be cost-effective because it helps reduce the number of AIDS-sick cases presenting at public hospitals. This has been shown to be the case in South Africa and Brazil (Nattrass and Geffen, 2005; Levi and Vitoria, 2002). Nevertheless, the up-front direct costs of ARVs are still high and of great concern to developing countries. Although a substantial reduction in the price of many ARV drugs occurred between 2000 and 2005, most drug price reductions and multi-country deals apply to older drugs and first-generation treatments (Barnett & Whiteside, 2006; Anderson, 2006). Scientific development has made second- and third-generation treatments an essential part of national treatment regimens, but these are all patented medications due to TRIPS compliance. As a result, the more advanced drugs are absorbing increasing proportions of national treatment budgets (Ford, et al., 2007).

As governments realise this cost burden, or come up against resource and financial shortages in implementing the policy, their justifications for any delay in the use of ARVs may be based on cost implications. However, for those governments who cite cost as an issue, the policy logic of this position is to take action to lower the costs of treatment. This may include the adoption of more flexible patent laws, the funding of local generic production, negotiations with pharmaceutical companies to lower pricing and gain technical assistance, and

the like. These efforts continue after the second phase in an effort to keep the cost of public provision manageable.

The third and final policy phase occurs once drug prices have become sufficiently low enough to allow for the expanded provision of ARVs through a HAART rollout. Although the South African government deviated from the justification employed in the second phase, it moved on to a phase of rolling out HAART (albeit begrudgingly) in 2004 after being successfully challenged by civil society to do so (Nattrass, 2007).

It should be noted that this case analysis is not an attempt to determine the 'true reasons' for certain government policies. Individual motivations for the choice of justifications employed have been tackled by other authors (see e.g. Fourie, 2006 and Nattrass, 2007 with regard to South Africa). It is nonetheless interesting to note that the trajectory of AIDS policy over time (the policy logic) is consistent with the way in which leaders articulate the nature of the policy constraints in earlier periods. It is in this regard that AIDS policy leadership really matters.

Brazil

1 – Policy development and possibility of ARVs

The first case of AIDS in Brazil was reported in 1982 and the epidemic was initially concentrated in major coastal cities, particularly in São Paulo (Beyrer, et al., 2005). The spread of the disease came at a time when the country was undergoing immense political changes – the military government was returning the country to democratic rule, culminating in indirect presidential elections in 1985 and direct elections in 1989. The intersection between the democratisation of Brazilian society and the initial outbreak of AIDS had profound consequences for the development of national AIDS policy. The initial cases were concentrated in an area (São Paulo) where activists had very recently been engaged in action against a military government. The methods of social mobilisation that they had developed as a movement toward democracy were adapted for use in the struggle for successful HIV prevention, treatment and care (Beyrer, et al., 2005). Parker (2003) also suggests that São Paulo was uniquely predisposed to responding to activist pressure – progressive state officials and ex-activists in government were more wiling to address the concerns of the public, lest they be considered hypocrites to their own democratic rhetoric. São Paulo state formed the initial Working Group on AIDS in 1983. It brought together civil society representatives, state officials and other interested parties

in an inclusive process to formulate a response. The state's programme became a model for other states in Brazil, culminating in the establishment of the National STD/AIDS Programme in the Ministry of Health (MoH).

A number of legal provisions that were included in Brazilian law during the 1980s enabled comprehensive treatment in later years. In particular, the 1988 Constitution established a national health system, stating that 'health is a right of all and a duty of the state' (Raupp Rios, 2003). Additionally, HIV-positive workers were guaranteed the same rights as workers with other chronic illnesses in two resolutions passed in 1985 and 1988 (Parker, 2003). In 1988, Brazil also became one of the first countries in the world to establish ethical guidelines for the management of HIV/AIDS (Levi & Vitoria, 2002). The São Paulo programme, and thus later the national programme, was based on a balanced approach to HIV including "prevention, treatment, care and protection of human rights" (Greco & Simão, 2007).

Once the early antiretroviral drugs (such as Zidovudine) became available in the late 1980s, the São Paulo government began to provide small quantities at no cost to poorer members of the population. This decision was initially adopted in an attempt to provide incentives for individuals to be tested and for doctors to report cases – a pragmatic justification typical of the government's very technical approach to HIV/AIDS in general (Berkman, et al., 2005; Parker, 2003). The success of the state's provision led other states to follow and ultimately established a principle for treatment to be provided on a national scale in 1991 (Ford, et al., 2007).

2 – Reality of costs and limiting provision

The initial national provision coincided with a broader crisis of corruption in the national government. President Fernando Collor's administration, elected in 1990, was crumbling under accusations of kickbacks (including some against the Minister of Health) and ultimately impeachment proceedings were instituted against him. During this time, the non-treatment components of the National AIDS Programme ground to a halt. A fiercely antagonistic relationship developed between civil society organisations and the government, despite the addition of the Zidovudine rollout – possibly the only aspect of AIDS policy that survived the meltdown (Parker, 2003).

The president resigned before the completion of impeachment proceedings. An interim government was established and plans for a national recovery were put in place. The government and AIDS non governmental organisations (NGOs)

applied for a loan from the World Bank to get the National AIDS Programme back on track. The process of drawing up a proposal for the World Bank went a long way toward repairing the relationship between the government and civil society on this issue (Parker, 2003).

However, the World Bank was focused on prevention as the best means of addressing the problem of AIDS. A 1987 World Bank document suggested that the conceptualisation of health services as a right and free provision of medication was not an appropriate approach to healthcare in developing countries (Araújo de Mattos, Terto & Parker, 2003). Whenever greater emphasis on treatment was included in the proposal, it was rejected by World Bank staff (Parker, 2003). The Collor administration's decision to provide costly Zidovudine on a national scale was repeatedly cited as an example of ineffective cost planning and a waste of resources. The Brazilian government was thus restricted in its capacity to expand the rollout due to cost implications. At this point in time (1992-1994), antiretrovirals were still extremely expensive, and treating greater numbers of people was not seen as a viable treatment option. Any funding of ARV treatment would have to come from (understandably limited) domestic funding. The progression towards universal access thus entered a second stage with the development of a proposal for the World Bank loan: World Bank staffers would not allow the use of loan funds for ARV provision. As domestic government funds were severely limited, this effectively restricted access to ARVs (Parker, 2003).

It should be noted that the World Bank also raised concerns about drug resistance due to poor adherence. Yet this concern was couched in an investment context as a waste of resources, rather than an insurmountable side-effect of using antiretrovirals (as would later be asserted in South Africa) (Greco & Simão, 2007).

Actions to lower costs

Given the economic justification employed for restricting provision, the logical next step on the path to provision was for the Brazilian government to attempt to lower costs if it really wanted to provide more ARVs. They approached this problem in a number of ways, establishing what is often referred to as a 'Brazilian model' of negotiating with pharmaceutical companies and producing generic ARVs locally (Nunn, et al., 2007).

Negotiations have played a strong role in reducing the price of ARVs in Brazil. The government has used threats of overriding patents and using the leeway in the TRIPS provisions to bargain successfully with pharmaceutical companies.

However, this tactic began to lose effectiveness after 2003, as the repeated threat of issuing compulsory licenses, without actually ever issuing any, became less credible (Ford, et al., 2007).

Although the government has negotiated reductions in prices, it has still purchased ARVs from drug companies at up to four times the prices available on the international market in the past (Cawthorne, et al., 2007). Other countries have been able to obtain the same drugs at a far lower cost – as an example, the lowest price Abbott was willing to offer Brazil for Lopinavir/Ritonavir in 2005 was $1380 per patient per year in exchange for Brazil not pursuing a compulsory licence, far exceeding the best offer available internationally from Abbott ($500). The Brazilian government also made numerous concessions during negotiations – such as accepting a moratorium on further price negotiations with Abbott as part of the 2005 deal (Ford, et al., 2007).

However, in addition to negotiations with companies, Brazil also has a long history of producing its own ARVs, with initial production beginning in 1993. A number of federal and state laboratories are involved in this production, the largest being the federal public laboratory FarManguinhos. The country only became TRIPS compliant in 1997, and is producing many generics that were patented before that date (such as Nevirapine). In 2007, 8 of the 17 antiretroviral drugs purchased by the government were being produced locally (Ford, et al., 2007).

Additionally, Brazil has opted to issue compulsory licenses for ARVs that are patented. Such a license allows a generic manufacturer to produce and sell a drug before the patent has expired, usually with some royalty paid to the owner of the patent (Cleary & Ross, 2002). The first to be issued was a license for Efavirenz, following unsuccessful negotiations with its manufacturer, Merck. A generic version is being imported from India until local production has stabilised. The government has also threatened to introduce a compulsory licence for Lopinavir/Ritonavir despite earlier concessions made during negotiations (Ford, et al., 2007).

The government's choice to act against high prices was directly in line with the goals of AIDS NGOs in the country. Civil society played a profound role in reducing the cost of treatment. Their actions have included filing suits against pharmaceutical companies (such as the case against Abbott in 2005) as well as cases against the government itself to act as a counter-pressure to trade pressure from the United States (Ford, et al., 2007). The Brazilian government has taken this counter-pressure very seriously, and continues to move toward using compulsory licenses for advanced ARVs. Brazil was one of the countries that

proposed the key WTO declaration regarding the use of the public health provisions in TRIPS at the 2001 conference (Teixeira, 2003).

The key point here is that both government and civil society were using the options available to them to act on the same goals. The government was thus able to utilise the expertise and community reach of NGOs to achieve treatment goals, while civil society has a complementary backdrop upon which to base its actions. AIDS NGOs continued to interact with the government on the treatment issue once treatment was publicly available. In September 1999, when the provision of ARVs was threatened by financial constraints, NGOs engaged in street protests to communicate to the government the need to continue state provision (Oliveira-Cruz, et al., 2004). The same situation occurred in November 2000, with civil society groups applying the same pressure successfully (Passarelli & Terto, 2003).

3 – Lower costs and expanded provision

Even so, in the early 1990s the benefits of ARV monotherapy (which were limited as resistance soon set in) were difficult to balance against fiscal priorities. A turning point came in the form of the 1996 World AIDS Conference in Vancouver. For the first time, evidence was clear that triple combination therapy, i.e. HAART, had the potential to change HIV infection into a chronic but possibly manageable disease (Parker, 2003). The benefits of long-term, multi-drug ARV therapy as a social investment became clearer. Later that year, the Brazilian Congress took the bold step of enacting a law promising free ARV treatment for individuals living with AIDS. It was the first developing country to do so (Ford, et al., 2007; Tantivess & Walt, 2006). The reduction in the cost of HAART through negotiations, domestic production and the like, allowed the government to utilise domestic funds to provide treatment while directing further World Bank funding to prevention efforts (Parker, 2003).

In sum, Brazil provides a clear example of the logical progression of policy through the three initial phases outlined above: the initial impetus toward provision, the cost justification for limiting that provision (followed by actions to reduce costs), and the ultimate expansion of provision.

Thailand

1 – Policy development and possibility of ARVs

Although Thailand underwent a different political transition to South Africa and Brazil, it nonetheless exhibits the same policy phases as the Brazilian case. The first case of AIDS was reported in 1984 (Over, et al., 2007) and the government responded relatively quickly. It has been suggested that the highly centralised military government in place when the epidemic first broke out may have had a greater capacity to enact clear, efficient AIDS policy than a democratic government (Rau, 2006). In any event, what is remarkable is that the military government chose to develop its AIDS policy in a fairly open policy environment (a factor which has probably central to its success).

Realising that the AIDS epidemic had broad social and economic consequences, the Thai government involved NGOs and AIDS scientists in policy development from an early stage. The Multi-sectoral AIDS Prevention Strategy (MAPS), introduced in 1991, paved the way for inclusive policy formulation by engaging NGOs, civil society and other parties in the development of a national response (Punpanich, et al., 2004). The legal groundwork for later calls for ARV provision was established through the introduction of a Social Security Law which committed the government to providing basic health care and life insurance for its citizens (Baker & Phongpaichit, 2005). It was against this backdrop of service provision that the government and NGOs undertook their very successful prevention efforts, such as the 100% Condom Programme which enlisted the help of Thai brothel owners (Punpanich, et al., 2004).

The focus shifted to AIDS treatment in 1992. In that year, an ARV monotherapy programme was established in public hospitals, providing a limited amount of ARV treatment for low-income groups (Punpanich, et al., 2004). Dual therapy was introduced in 1995, catering to 25% of the symptomatic patients in the health system (Ford, et al., 2004).

2 – Reality of costs and limiting provision

However, an evaluation by specialists from the World Bank, the World Health Organization (WHO) and the Ministry of Public Health (MOPH) deemed the programme to be one of high costs and low benefits (Phanuphak, 2004). A large number of patients were lost in the follow-up process, and the clinical survival benefits of monotherapy and dual therapy were not substantial enough to outweigh the expense involved. Even before the review took place, officials in

the MOPH noted that public finances would be unable to meet the growing demand for ARVs.

While the number of patients receiving ARVs was maintained at around 2000 per year between 1996 and 2001, provision was not expanded due to cost concerns. Instead, the budget allocated to ARV provision was used to support the MOPH clinical trials network. The research network focused on evaluating new drugs to treat AIDS, shifting the focus from expanding treatment to improving the monitoring of treatment (Tantivess & Walt, 2006). In addition the advent of the 1997 Asian financial crisis had a profound impact on the funds available for social spending. Reductions in government spending saw the total AIDS budget being cut by half, further hampering the chances of expanded provision (Phanuphak, 2004).

Actions to lower costs

Direct negotiations with pharmaceutical companies have been less fruitful for the Thai government than they were in the Brazilian case, as they have not obtained similar decreases in ARV prices. While engaging in negotiations, Thailand instituted legal challenges to patents to force companies to lower their prices or withdraw their patent applications, but the decisions in many of these cases are still pending (Ford, et al., 2007).

In addition to negotiations and legal challenges, Thailand's Government Pharmaceutical Organisation (GPO) began researching the production of first-generation ARV drugs in 1992 and launched its first successful ARV (Zidovudine) in 1997 (Ford, et al., 2007; Punpanich, et al., 2004). This was possible because many first-generation ARVs became available before Thailand became TRIPS compliant. The government could develop generic versions of ARVs based on the original drugs as the original drugs had not been placed under patent in Thailand – and TRIPS compliance demanded that original drugs developed after 1992 be protected under patent (Ford, et al. 2007). The government has invested substantially in this production – GPO now manufactures numerous medicines with a special emphasis on Thailand's National List of Essential Drugs (which includes ARVs) (Kraisintu, 2004). The use of locally produced generics in a public treatment programme allows governments to cut the costs of providing free ARVs.

However, first-generation drugs tend to produce resistance in patients and have been eclipsed by advances in multi-drug therapy. In 2000, the MoPH began to promote triple therapy as the norm, but limited the coverage to very low

numbers of patients due to the price of more advanced drugs which were all patented under TRIPS (Ford, et al., 2004). The successful introduction of a generic combination drug by GPO, GPO-vir, in 2002 made the possibility of affordable HAART more realistic (Kuanpoth, 2006).

Despite the trade pressure placed on the country, the Thai government took unprecedented steps toward securing cheaper new drugs in 2006 and 2007. In particular, the government announced that it would take advantage of the TRIPS flexibility in terms of compulsory licensing in November 2006. Stock shortages and high prices had limited the supply of Efavirenz, a second-generation drug prescribed as part of the public health regimen, since 2004. The drug's patent-holder, Merck, offered a lower price and sought further US trade pressure to block the licence, but the Thai government persisted. The government also issued a compulsory licence for Lopinavir/Ritonavir in early 2007, following the collapse of negotiations with the manufacturer (Ford, et al., 2007).

Civil society action

AIDS NGOs also focused on making treatment affordable. It should be noted that before 2000, activists did not put as much pressure on the government in favour of treatment, because they accepted that high prices were a limiting factor on provision (Tantivess & Walt, 2006). In particular, Thai civil society groups utilised the legal route in challenging monopoly prices, in parallel with government action. For example, the AIDS Access Foundation and two patients challenged a Didanosine patent application by Bristol Myers Squibb on technical irregularities. The court ruled that patients can challenge patents that could restrict their access to health care, and denied the new patent application (Ford, et al., 2007). In a similar case, the revocation of the Didanosine patent was sought by other patients and a different NGO, the Foundation for Consumer Protection of Thailand. BMS was pressured into settling out of court, by surrendering its exclusive marketing rights for the drug and withdrawing its appeal of the earlier Didanosine case in exchange for the second lawsuit being dropped (Kuanpoth, 2006).

However, once GPO-vir became available and other lower ARV prices were successfully negotiated, activists turned their attention to pressuring the government to expand provision. The government established universal health coverage in October 2001, but did not include ARV treatment in the package of benefits. The public outcry in favour of HAART was overwhelming and NGOs and coalitions ran intense campaigns in an effort to have ARV treatment included (Punpanich, et al., 2004). NGOs argued that the costs and

consequences of medication should be reassessed, as developments in medical technology and lower ARV prices made treatment more feasible than it had been during the initial World Bank evaluation (Tantivess & Walt, 2006).

3 – Lower costs and expanded provision

Finally, bowing to activist pressure and recognising the favourable outcomes of actions to lower costs, the government announced that it would include ARVs in the immediate health plan, and that resources would be allocated for the provision of HAART in the future (Punpanich, et al., 2004). While intense domestic advocacy played a strong role in this decision, Tantivess & Walt (2006) suggest that the most crucial element in the policy change was the dramatic decrease in the price of ARVs. This was achieved particularly through domestic production efforts, but also through negotiations and other cost-reducing activities.

Once the importance of the resource issue was lessened, new policy discussion was framed according to an "underlying ideal that it was people's right to access all essential health services" (Tantivess & Walt, 2006). Activists and MoPH officials continue their efforts to reduce the cost of new ARVs. Again, the logical next step for the government after employing a cost justification for limiting provision was to attempt to lower costs. This aligned their goals with those of AIDS NGOs and allowed both to pool their resources in addressing high drug prices.

South Africa

1 – Policy development and possibility of ARVs

The South African case also followed the three policy phases regarding ARV provision – but with the added complexity caused by the President's doubts about AIDS science and ARVs. The first case of AIDS was reported in 1982 at a time when the apartheid state was experiencing major challenges to its legitimacy and power. The initial development of AIDS policy was limited by the inaction of the apartheid administration and the development of a comprehensive response eventually took place outside the government during the political transition to democracy. Civil society organisations met with the health department at a 1992 conference entitled 'South Africa United against AIDS' (Fourie, 2006: 100). This conference launched the National AIDS Committee of South Africa (NACOSA), through which a National AIDS Plan

was developed – a plan adopted by the new democratic government as a Presidential Lead Project in 1994 (Schneider, 1998; Schneider, 2002).

A number of legal developments took place during the Mandela administration which set the tone for a human rights-based, comprehensive approach to people living with HIV/AIDS. Free primary care was offered nationally to pregnant women and children less than 6 years of age in 1994. In 1996, free health care was expanded to include 'all personal consultation services, and all non-personal services provided by the publicly-funded (health care) system" (Bond, 1999). The government also established an Essential Drugs List (EDL) of medications to be available at public clinics.

A further legal development that appeared to pave the way for ARV treatment was the introduction of a new Medicines Act in 1997. It contained a clause that would allow the overriding of patents in the interests of public health. Despite strong trade pressure from the United States government to remove the controversial clause, a new bill with similar provisions was passed in 1998 (Bond, 1999). The first attempts to include ARVs into the public system were made towards the end of the decade. In 1998, the government launched pilot projects to test the effectiveness of Zidovudine for MTCTP (Nattrass, 2007: 45).

2 – Reality of costs and limiting provision

Then, in October of the same year, senior government officials halted preparations for the provincial rollout. Health Minister Nkosazana Zuma justified this decision by claiming that resources could not be allocated to treating people who were already infected, and should rather be focused on prevention (Nattrass, 2007: 45). She reiterated this justification the following year, claiming that "budget shortfalls prevented her from providing HIV-positive women with Zidovudine" (Bond, 1999).

Actions to lower costs?

Initially, it seemed that the government would follow the logical process of attempting to lower the cost of treatment in order to move forward to expanded provision. The retention of the contentious Medicines Act clause appeared to allow for the importation of generics or compulsory licensing. The Pharmaceutical Manufacturers' Association of South Africa (PMA) immediately challenged the Act as contravening South Africa's obligations as a WTO member committed to TRIPS (Cleary & Ross, 2002).

The government was particularly resistant to trade pressure on the Medicines Act, going so far as to tell the US government that the South African trade representatives would not budge from their position (Bond, 1999: 774). The PMA case came to court in 2001. The PMA eventually settled out of court, an outcome hailed as a victory for the South African government and a sign that cheap generic imports or domestically produced drugs were on the way. However, this was not the case. In settling the case, the government made it clear that the contentious clause was to facilitate parallel importation (which the PMA was not particularly hostile to) rather than compulsory licensing (which it was). The government subsequently made no attempt to issue, or even threaten to issue, a compulsory license for any drug. According to Cleary and Ross (2002), the government had initially intended to use the legislation to issue compulsory licenses, but that once the issue was portrayed by activists and the media as an ARV issue, they no longer wanted to follow this route. Settling the case thus provided an exit from the political bind of activist pressure.

This suggests that the government was opposed to the use of ARVs *per se* – not simply because they were relatively expensive. The fact that the Health Minister failed to negotiate with drug companies over ARV prices – even responding grudgingly (if at all) to offers from Pfizer and Boehringer Ingelheim to provide free AIDS drugs – and stood in the way of a Global Fund grant to KwaZulu-Natal for the use of ARVs, adds further weight to this hypothesis. Both Nattrass (2007) and Cleary and Ross (2002) argue that the government did not take cost-reducing action because they never intended to provide ARV treatment on a national scale, whether the price of treatment came down or not.

2 – Change in justification

To recap: the government initially cited affordability as a reason for not using ARVs. As pointed out in the case of Brazil and Thailand, the logical next policy phase would have been to try and reduce the costs. But South Africa did not. If the government turned down opportunities to reduce the cost of treatment, what justification did it employ? While initial justifications were based on cost effectiveness, the justification for not rolling out treatment switched to different concerns about the efficacy of ARVs, drug resistance and the toxicity of their effects on the human body. This was linked, in particular, to Thabo Mbeki's succeeding Nelson Mandela as president.

The 1999 general election saw a change in administration with a new president and health minister. Almost immediately the justification for limiting national ARV provision changed to questions regarding the science of treatment. In

October, President Thabo Mbeki told the provincial council that Zidovudine was toxic and should not be given as treatment without further testing. He would later tell the ruling party's caucus that the CIA and pharmaceutical companies were behind the 'assumption' that HIV causes AIDS, and that civil society organisations were being funded by drug companies. Similarly, and despite investigating the use of another (cheaper) treatment, Nevirapine, after a successful Ugandan trial, the Health Minister's position became one of questioning the scientific evidence surrounding the use of ARVs and using this as a means of delaying the use of ARVs for either HIV prevention or treatment. Her clear hostility to ARVs was illustrated, when after finally being compelled by the court to introduce MTCTP, she said that she was being forced to 'poison her people' (Nattrass, 2007: 191).

Concerns about scientific issues of toxicity and drug resistance are well known in AIDS policy circles. However, the World Health Organisation had cleared the side effect profile of Zidovudine as acceptable given its therapeutic benefits (The Lancet, 2007), and the introduction of new types of ARVs had lessened concerns about developing resistance in patients. These concerns were thus less credible than concerns of cost effectiveness, but this did not dissuade senior officials from their approach.

Actions to re-examine evidence

By following Mbeki's lead (in adopting his AIDS denialist critique of ARVs), senior officials changed how they framed the debate and thus which logical next step in policy would follow from it. Mbeki and his Health Minister positioned themselves as opponents to mainstream AIDS science, questioning the possibility that HIV could cause AIDS and suggesting that poverty, malnutrition and the like played a greater role. The logical progression in policy from questioning ARVs and AIDS science is not to take action to lower the cost of ARVs. Rather, the most logical step is to investigate the assumptions and re-examine existing evidence, as senior officials set out to do.

In early 2000, the creation of a Presidential AIDS Advisory Panel was announced. The panel included prominent AIDS denialists, whose theories had long since been discredited by the success of clinical trials of the use of ARVs (including Zidovudine) for HAART and MTCTP. These denialists argued that HIV did not exist, or that it did exist but was harmless. This viewpoint goes against the accepted scientific understanding of HIV and AIDS, and tends to consider ARV drugs as a threat (and possible cause of AIDS) (Nattrass, 2007).

Mbeki was clearly opting to use this discourse as a justification for not expanding provision. In addition, the panel also included some mainstream scientists. Unsurprisingly, the report produced by the panel consisted of two contradicting elements. On the one hand, ARVs were held to be effective and safe. On the other, they were considered ineffective and/or dangerous. The questioning of mainstream science adopted by Mbeki was further illustrated when the new South African National AIDS Council (SANAC) was established with no representation from scientists, doctors or AIDS activists (Nattrass, 2007).

The most important consequence of this new justification was to reverse decisions regarding the expansion of ARV provision. The government announced that it could not implement a nationwide programme of providing ARVs for MTCTP without analysing data from the pilot sites – which were limited to two per province (Baleta, 2002; Schneider, 2002).

Civil society action

One of the most active organisations taking up the opposition role to the government's denialist stance was the Treatment Action Campaign, formed in 1998 by ex-political activists. The founders of the TAC had assumed that their main focus would be similar to that of AIDS NGOs in other countries, namely to campaign for lower ARV prices from pharmaceutical companies (Nattrass, 2007). The appointment of a new health minister (Tshabalala-Msimang) in 1999 had raised hopes that South Africa would follow the example of Brazil and Thailand in introducing a MTCTP programme (Schneider, 2002). However, the TAC found itself in the difficult position of having to divide its resources between pressuring companies and convincing the government that an ARV rollout was safe, effective and necessary.

The TAC has successfully used legal avenues to alter government policy. In a landmark case against the South African government, the TAC filed a suit regarding the restriction of Nevirapine provision to pilot sites. The case progressed all the way to the country's Constitutional Court, which ultimately ruled that the government roll out MTCTP using Nevirapine to public hospitals (Annas, 2003; Gernholtz, 2002). The organisation has also launched a number of civil disobedience campaigns to protest the implementation of ARV policy (Nattrass, 2007).

At the same time, the TAC and its allies took other action to lower the price of ARVs. Their activities included bringing generic drugs into the country illegally

and lodging Competition Commission complaints against major pharmaceutical companies (Baleta, 2002; Elliott, 2002). Settlements with these companies have resulted in the licensing of the local production and/or importation of generic drugs (Nattrass, 2007). TAC action against both government and pharmaceutical companies has continued well into the next phase of policy.

3 – (Slowly) expanded provision

Finally, in October 2003, the South African cabinet issued a statement supporting ARVs and effectively departed from the denialist stance held by Mbeki and his Health Minister. Despite continued references to drug resistance and costs, country-wide protests (similar to those in Thailand just prior to the declaration of universal access) prompted the government to announce a plan to roll out ARVs (Achmat & Simcock, 2007). However, the rollout process was slow: the drug tender process only commenced in January 2004 and most provinces only began to roll out treatment in 2005 (Nattrass, 2007). It appears that sufficient resources were allocated for the expanded provision, suggesting that government procrastination on the issue continues to plague public provision.

The TAC has kept up its pressure on the government in protest of the slow rollout. It has joined with partners (such as the Congress of South African Trade Unions) to call on the government to speed up the process and threatened legal action if this does not occur. At the same time, it continues to pressure pharmaceutical companies to lower the prices of ARVs (Nattrass, 2007).

Conclusion: official justifications and ARV provision outcomes

The Brazilian and Thai cases follow a similar set of policy phases that resulted in logical and internally coherent policy trajectories. The South African case is different, but not necessarily due to differing circumstances such as a higher disease burden. Rather, the ways in which senior officials have shaped policy debates on the provision of ARVs have led to a different logical policy progression which delayed the rollout (and probably hampered its eventual implementation). The government was side-tracked from the initial logical policy progression by President Mbeki's doubts about the science of AIDS pathogenesis and treatment. The justification for not rolling out ARVs switched from high costs to doubts about scientific evidence. The logical next step thus

shifted to re-examining the scientific assumptions behind ARV provision – rather than reducing the costs of ARVs.

This change in justification split external resources away from lowering costs – civil society organisations had to spend time fighting companies *and* convincing the government that the scientific evidence was correct. Astoundingly, AIDS NGOs in South Africa were able to place enough pressure on the government that, coupled with international sentiment and lower drug prices, the option of providing universal access to HAART was projected back onto the policy table. Thus, even though the justifications de-railed the process and made it much slower, causing many deaths, it was unable to stop the same outcome (HAART rollout) from occurring as in Brazil and Thailand. Whether this is a function of the strength of South African AIDS NGOs or some other inevitability of HAART provision is difficult to say. What these case studies do illustrate is the impact that senior leadership can have on the policy process by defining the parameters of public debate. It appears that the issue of 'good governance' is a crucial one – particularly in the case of HIV/AIDS where hundreds of thousands of lives are at stake.

Appendix A: country timelines of key events

Brazil

PHASE 1: Policy development and possibility of ARVs		
Senior statements & legislative declarations	*Govt action*	*Civil society action*
1985: AIDS is declared by the government to be a public health (not medical) problem to be addressed by state health secretariats 1987: Medical Council of São Paulo passes resolution urging against dismissal of HIV+ workers 1988: Brazilian National Health System established in the Brazilian Constitution 1988: Congress passes law granting rights guaranteed to workers with incapacitating or terminal illnesses to PLWHA	Mid 1983: Working group on AIDS established in São Paulo late 1980s: São Paulo begins providing ARVs to low income groups May 1985: MOH establishes the guidelines for the creation of the National AIDS Control Program (NACP) of Brazil 1986: NACP consolidated with the inclusion of sexually transmitted infections as the centre of action 1988: MOH establishes ethical guidelines for the management of HIV/AIDS 1989: The State of São Paulo begins to purchase and distribute Zidovudine 1990: The MOH begins acquisition of ARVs and additional treatments for opportunistic infections 1991: National government begins providing Zidovudine monotherapy 1992: NACP reorganised	1985: GAPA (the AIDS Prevention and Support Group), the first nongovernmental AIDS service organisation in Brazil, is formed 1986: ABIA (the Brazilian Interdisciplinary AIDS Association) is formed 1989: The Grupo Pela Vidda (the Group for Life), the first self-identified HIV-positive advocacy group in the country, is founded 1990-1992: Antagonistic relationship between civil society AIDS NGOs and government
PHASE 2: Reality of costs & limiting provision		
Senior statements & legislative declarations	*Govt action*	*Civil society action*
1992: Proposal for World Bank loan for AIDS programme	1992: AIDS Project I World Bank loan) instituted, effective between 1992 and 1998 1993: Local production of ARVs started	

PHASE 3: Slowly expanded provision		
Senior statements & legislative declarations	*Govt action*	*Civil society action*
Dec 1996: Brazil's Congress enacts law requiring free treatment for individuals with AIDS 1997: MOH decree establishes the treatment protocols related to CD4 counts and viral loads Aug 1999: Ministry of Health reveals need for a budget supplement to correct the lag of resources caused by the devaluation of Brazilian Real vis-à-vis United States dollars in the purchasing of medicines Feb 2001: Brazilian Ministry of Health announces its intention to license compulsorily the Nelfinavir and Efavirenz patents August 2001: After six months of negotiations with the Swiss company Hoffman-La Roche, MOH announces intention to issue compulsory licence for Nelfinavir, achieving significant reduction in return for dropping the compulsory license 2003: Presidential decree facilitates the import of generic drugs produced under compulsory licensing	1997: MTCTP programme established 1997: MoH creates national computerised system to track ARV use 1998: AIDS Project II (World Bank) instituted, effective from 1998 to 2002 January 2001: United States presents complaint to the WTO against article 68 of the Brazilian Law of Patents March 2001: Agreement signed in March between the Brazilian MOH and Merck Sharp & Dohme reduced prices of Efavirenz and Indinavir. 2001: Patent amendment passed to include public health flexibilities - authorises the Brazilian Drug Regulatory Authority to assess patent claims for pharmaceutical products and processes before a patent is granted 2001: WTO member countries meeting in Qatar pass a declaration proposed by Brazil and India stating that the TRIPS agreement can not override issues of public health 2003: Government negotiates with Merck (Efavirenz), Abbott (Lopinavir/Ritonavir) and Roche (Nelfinavir), accepting lower price offered by these companies 2005: Government accepts Abbott's price offer on Lopinavir/Ritonavir and moratorium on future price negotiations with the company for the drug 2006: Government threatens compulsory license on Lopinavir/ritonavir; Roche's lower price accepted by govt May 2007: Government issues compulsory licence for Efavirenz	Sept 1999: NGOs organise street demonstrations and efforts to send messages to government authorities in response to statements about budget constraints Dec 2005: NGOs launch case against both Abbott and Brazilian government demanding use of compulsory license for Lopinavir/Ritonavir

Thailand

PHASE 1: Policy development and possibility of ARVs		
Senior statements & legislative declarations	*Govt action*	*Civil society action*
1989: Social Security Law providing basic health care and life insurance 1991: Multi-sectoral AIDS Prevention Strategy (MAPS) of Thailand instituted 1992: TRIPS Agreement was fully implemented, patent act amended	1988: First Thai national AIDS budget introduced 1989: National HIV Serosurveillance Program was established 1989: 100% Condom Program conducted in Ratchaburi Province 1991: 100% Condom Program expanded nationally 1992: ARV monotherapy rolled out in public hospitals 1992: GPO begins research on generic Zidovudine and Didanosine 1995: ARV dual therapy in public hospitals, 25% of symptomatic patients	

PHASE 2: Reality of costs & limiting provision		
Senior statements & legislative declarations	*Govt action*	*Civil society action*
1995: Joint evaluation if the ARV programme by the World Bank, the World Health Organization (WHO) and the Ministry of Public Health (MOPH)	1995: ARV financing redirected to Clinical Trials Network 1995: GPO launches generic Zidovudine into market 1997: Publicly-funded ART programme terminated BUT some patients still funded until 2001 1997: Asian financial crisis – AIDS budget is halved Nov 1999: GPO requests compulsory licence from Thai Department of Intellectual Property (supported by NGOs) but use of compulsory licensing is rejected 2000: Clinical Research Network is reformulated into the Access to Care Initiative, instigated to provide highly active antiretroviral therapy (HAART) on a service basis, but with limited coverage 2000: GPO launches generic Didanosine and Stavudine 2001: GPO launches generic Nevirapine October 2001: Universal health insurance coverage established (excluding HAART)	1996: Thai Red Cross Society launches donation campaign providing free Zidovudine for MTCTP May 1999: AIDS Access Foundation and two patients file lawsuit against Bristol-Myers Squibb and Thai Department of Intellectual Property (charges not upheld) 2000: Thai activists submit letter to US government, opposing trade sanctions threatened in response to compulsory licensing Feb-Oct 2001: massive campaigning for provision of ARVs Oct 2001: public outcry over exclusion of HAART from universal healthcare package

PHASE 3: Slowly expanded provision		
Senior statements & legislative declarations	*Govt action & GPO*	*Civil society action*
Dec 2001: Minister of Public Health of Thailand announces universal ARV provision	2001: Government negotiates with Merck unsuccessfully (Efavirenz) 2001: Government negotiates with Gilead (Tenofovir) and accepts lower offered price April 2002: GPO launches GPO-VIR (combo of d4T, 3TC and Nevirapine) 2003: Generic Zidovudine/Lamivudine produced by GPO 2004: Wide-scale provision of HAART begins 2004-2006: Fruitless negotiations with Abbot over price of Lopinavir/Ritonavir 2005: Provision of ARVs taken over by UC from MOPH's Disease Control Department Nov 2006: Thai Minister of Public Health announces compulsory licence for Efavirenz 2006: Merck offers price of Efavirenz US$288 per patient per year, but at the same time lobbies the US govt and DG of WHO to pressure Thai govt to negotiate rather than issue a compulsory licence early 2007: Compulsory license issued for Lopinavir/Ritonavir	Oct 2002: Thai Central Intellectual Property and International Trade Court ruled that patients may challenge the legality of patents Feb 2003: Delegation of senior officials from MOPH and individuals living with HIV/ AIDS from Thailand undertake a study visit to Brazil Early 2006: NGO challenges GlaxoSmith-Kline (GSK)'s patent application on combo Zidovudine/Lamivudine. GSK withdraws patent application and announces withdrawal of applications or granted patents for this formulation in all countries 2007: Civil society groups demand that Thai Foreign Affairs and Commerce Ministries support action of the Public Health Minister more actively

South Africa

PHASE 1: Policy development and possibility of ARVs		
Senior statements & legislative declarations	*Govt action*	*Civil society action*
1991: HIV testing dropped from immigration requirements 1994: Free primary care offered nationally to pregnant women and children under six 1996: Free health care expanded to include "all personal consultation services, and all non-personal services provided by the publicly-funded PHC system" 1997: New Medicines Act passed 1998: New medicines bill passes with similar provisions on generics	1992: NACOSA (the National AIDS Committee of South Africa) launched 1993: National AIDS plan developed by NACOSA 1994: Government adopts national AIDS plan as a Presidential Lead Project 1996: Government establishes an Essential Drugs List (EDL) 1997-1998: Virodene saga 1998: PMA launches case against government Medicines Act of 1997 July 1998: Government launches pilot projects to test Zidovudine for MTCTP	1992: 'South Africa United against AIDS' conference
PHASE 2: Reality of costs & limiting provision		
Senior statements & legislative declarations	*Govt action*	*Civil society action*
1998: Health minister says that resources can not be spent on people already infected 1999: Health minister claims that budget shortfalls prevented her from providing Zidovudine for MTCTP	Oct 1998: Senior government halts preparations for provincial rollout	1 Dec 1998: TAC launched 21 March 1999: TAC holds rallies calling for MTCTP

PHASE 2: Change in justification		
Senior statements & legislative declarations	*Govt action*	*Civil society action*
28 Oct 1999: Mbeki tells NCP that Zidovudine is toxic Feb 2000: Health minister rejects reports on safety of Zidovudine from MCC April 2000: Thabo Mbeki sends letter to world leaders expressing his doubt that HIV was the exclusive cause of AIDS and arguing for a consideration of socioeconomic causes Sept 2000: Mbeki tells ANC caucus that TAC is funded by pharmaceutical companies and warns parliamentary members about taking ARVs Oct 2000: tells ANC caucus that CIA/drug companies are promoting the idea that HIV causes AIDS Oct 2000: Mbeki claims that he is withdrawing from public debate on ARVs April 2001: Mbeki raises doubts over ARVs in ETV interview and rejects calls for ARVs because they are not yet proven safe 2002: Government says it can't implement a nationwide programme without analysing data from the pilot sites and this would take at least two years June 2002: Health minister says that she must 'poison her people' because of the court order to roll out	1999: Glaxo-Wellcome offers 70% discount on Zidovudine price but government rejects offer Jan 2000: SANAC created with no reps from medical professionals, scientists or TAC May 2000: First meeting of PAAP July 2000: Boehringer Ingelheim agrees to make Nevirapine available free to the SA govt for 5 years, but government rejects offer July 2001: Government decides to do a pilot study of Nevirapine, with two sites per province Nov 2002: AIDS denialist Robert Giraldo addresses Department of Health on nutrition June 2002: Government stalls Global Fund grant ($72 million) to KZN July 2002: MCC demands new proof of efficacy of Nevirapine from manufacturer Jan 2003: Health minister invites Giraldo to address meeting of SADC health ministers	July 2000: World AIDS Conference in Durban - protestors urge Mbeki to break silence on AIDS; scientists sign Durban Declaration July 2000: TAC organises Global March for Treatment Access and threatens legal action over MTCTP July 2000: TAC launches defiance campaign to reduce the price of Fluconazole 8 Sept 2000: COSATU and SACP calls on government to end AIDS speculation and provide treatment March 2001: Pfizer makes Fluconazole free to govt clinics as a result of TAC's campaign Aug 2001: TAC files suit against govt over restriction of Nevirapine to pilot sites only Jan 2002: Activists file compulsion order to force the government to obey a December 2001 court decision that it should speed up the use of Nevirapine, or give good reasons why it can not July 2002: Constitutional Court orders government to expand MTCTP Nevirapine to public hospitals Sept 2002: TAC lodges a complaint with Competition Commission against GSK and BI – the Commission upholds the complaint Mar-Apr 2003: TAC civil disobedience campaign Aug 2003: Healthcare workers send petition to health minister regarding the provision of ARVs Dec 2003: Settlements reached at Competition Commission obliges the two companies to license the local production and/or importation of generics

PHASE 3: Slowly expanded provision		
Senior statements & legislative declarations	*Govt action*	*Civil society action*
2003: Cabinet accepts ARVs can help, but points to affordability, drug resistance 2003: Cabinet commits to providing ARVs in public sector and promises an operation plan Nov 2003: Government announces 'Operational Plan for HIV and AIDS Care and Treatment for South Africa' to roll out MTCTP and HAART April: Government releases National Strategic Plan 2007-2011, which includes ARV treatment	Aug 2002: Government grants approval for Global Fund grant to KZN Jan 2004: Roll out drug tender process initiated Feb 2004: Mbeki shifts roll out target by a year in state of the nation speech April 2004: Provision officially commences Sept 2004: Government releases ARV treatment guidelines 2005: Roll out begins in all provinces by end of year	March 2004: TAC threatens legal proceedings to speed up ARV rollout Mar/Apr 2004: TAC holds public meetings to protest slow rollout Nov 2004: TAC and ALP write letter to MSD calling for more generic licenses on Efavirenz Feb 2005: COSATU & TAC issue statement on failure of health minister to spend money allocated to SANAC Feb 2005: TAC marches on parliament to protest slow pace of HAART rollout May 2005: TAC demand to health minister to arrange compulsory license for Efavirenz July 2005: SA prisoners organisation for human rights threatens legal action over not receiving ARVs in prison, and hunger strike at Westville prison July 2005: Police fire rubber bullets at TAC protesters 29 Nov 2005: TAC files court papers against Health minister and denialist associates 2006: TAC continues to pressure pharmaceutical companies to lower prices Aug 2006: TAC protests at international AIDS conference Aug 2006: TAC protestors occupy provincial government offices and are arrested Sep 2006: International scientists send letter to Mbeki calling for health minister's resignation

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