government accountable for quality HIV prevention, testing and treatment services.

The prevention community is coming to terms with the complexity of HIV prevention and being urged to make better use of existing data, to ensure resources are directed to where the epidemic is and to what drives it, to address vulnerability and structural determinants, and to apply what we know works with sufficient quality, intensity and scale.[8 13] 14 These are the principles that have characterised Avahan's approach from the start. The fact that, this many years into the epidemic, we are also rediscovering the importance of sex-worker interventions makes Avahan's achievement over the last 5 years even more remarkable. Avahan stands as a rare example of the enormous power of data and community—especially when working together—to challenge an epidemic and a mindset, and to overcome both.

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the US Centers for Disease Control and Prevention.

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Avahan: the transition to a publicly funded programme as a next stage

Prasada J V R Rao

Avahan the flag ship programme of the Bill & Melinda Gates Foundation (BMGF) for the prevention of HIV in India was projected as a unique business model that brought private sector efficiency to a public health programme. However, within a period of 3 years after its launch, the programme already started planning for a phased withdrawal and a 'graceful transfer' into a publicly funded programme.[1]

Avahan with a US$250 million project cost was effectively complementing the Government of India's efforts to control AIDS through its own publicly funded National AIDS Control Program (NACP). Avahan was tasked to deliver to scale, high quality prevention interventions to high-risk community groups in six high prevalence states and make an impact on the progression of the epidemic in these states.

Six years later, despite its impressive success in rapid scale up and efficient management of programme delivery, Avahan is coming under criticism for trying to wind up early from India, and worse, for experimenting with a model that is high cost in terms of unit costs of intervention. The programme, which aimed at ultimate community ownership of the interventions, has initiated the process of transfer before this objective is fully realised.

The feasibility of Avahan's proposed transition into a publicly funded programme can only be assessed against the background of the importance given to prevention programmes among high-risk groups in NACP.

India's national programme[2] was ahead of its time in 1999 when it earmarked 14% of its programme budget for 'targeted interventions' in the prevention programmes for high-risk populations. Four years later, when BMGF launched the Avahan programme, it had a ready-made model of focused interventions among these risk groups to adopt, refine and upgrade. The upgraded model of focused interventions was allotted 57% of the US $250 million of committed resources for Avahan.[3] The first phase of Avahan ended in 2008 with impressive impact results on the coverage of high-risk populations, strengthening prevention infrastructure and the delivery of services.

While the general impression was that Avahan will continue to deliver these services under the new business model, the BMGF had other priorities. The strategy of the Foundation seems to have shifted to the transfer of ownership to Government, much earlier than originally envisaged. In October 2006, less than 3 years after the launch, the mid-term review had already recommended 'exploring alternative positions to align the organisation with changing priorities as the program managers scale down their implementor role and focus more on packaging the learnings from Avahan'.[3]

The success definition of Avahan therefore shifted only to demonstrate

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programmes at scale with coverage and quality and 'graceful transfer' of programme funding without disruption.[1]

The publicly funded NACP phase 3 has a much stronger focus on prevention among high-risk groups, but the expansion of the Government's programme without adequate managerial and monitoring support at the State AIDS Control Society (SACS) level has caused serious operational problems in the delivery of quality prevention services. The SACS are ill equipped to take on a vastly scaled up intervention programme for high-risk communities. Some of the state societies face rotation of managers almost every year undermining the effectiveness of programmes.

However, NACP 3 has a lower per capita cost for its interventions compared with the Avahan programme. Whereas the sub-grant level costs of Avahan compare favourably with NACP costs, (US$45–40 per beneficiary) the Avahan programme spends much higher (US$14–5) costs on programme management.[4] To the National AIDS Control Organisation (NACO) and SACS this presents a better model for the more efficient management of focused programmes. Strengthening the management structure of the SACS is an essential prerequisite for the transfer of Avahan programmes, even in better administered states.

The area of concern for NACO is the large overhead costs Avahan incurs in the senior managerial cadre. Avahan spends US$18 per beneficiary on these overheads, whereas NACO spends US$5 per beneficiary.[4] It also includes incentives to attract beneficiaries to service facilities, which a government programme cannot afford. A smooth transfer of management to NACO entails a substantial reduction of these overheads, which account for almost 25% of the project costs.

It is therefore a matter of debate whether a well-run and well-funded community programme such as Avahan should transform itself into a publicly funded programme. The transition model being worked out still provides for technical support from Avahan phase 2 to the transferred programme. Field-level supervision will be strengthened by following Avahan standards. The transition will be only partial during NACP phase 3, with only 10% of the programme component transferred in the first year. Full transfer is envisaged only with the fourth phase of NACP in 2013/14.

The transition model does not take into consideration the new strategies that are now recommended for managing community-based prevention programmes. It is an established fact community programmes are better managed by communities themselves. Avahan itself has started with this philosophy but the transition model does not sufficiently articulate on how to ensure it in a publicly funded programme.

The Commission on AIDS in Asia recommended an alternative model of public private partnerships for financing and managing community programmes.[5] Transfer of funds from government agencies to civil society partners suffers from bureaucratic delays and corruption. A public private partnership model with an autonomous body with government and community partnership provides a better alternative for the transfer of Avahan programmes. BMGF and NACO should carefully examine this as a better model for 'nationalising' the programme. This can also be progressively adopted by NACO for its own prevention programmes in NACP 4 for the more efficient management and utilisation of resources and accountability for performance.

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Recreating the impact of interventions in the absence of baseline data: challenges for intervention programmes

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Condom-promotion interventions have been a cornerstone of the HIV-prevention effort since the mid-1980s.[1] Initial efforts were largely education-based and used simple process outcomes, such as condom-distribution statistics. Programmes rapidly became more sophisticated, and interventions based on behavioural models were rapidly implemented. One of the most challenging issues in designing and evaluating these interventions has been outcome measures. Ideally, behavioural interventions should be evaluated on disease-incident impact measures. Since HIV incidence is uncommon even in high-incident areas, intervention impact has largely used behavioural measures, such as the proportion of sexual acts in which condoms were used. These are by definition self-reported and subject to bias. In HIV/STD clinical settings, and in the context of prevention intervention studies, there is often implicit social desirability to over-report condom use. These measurement issues have a profound impact on intervention effectiveness evaluation.

Approaches to improving validity have included refining survey report methods. This has included intensive training of interviewers, and using self-administered computerised techniques. Using other biological measures, such as other sexually transmitted infections, is not practical in