



World Bank Global
HIV/AIDS Program

HIV/AIDS - *Getting Results*

These reports describe activities, challenges and lessons learned during the World Bank's HIV/AIDS work with countries and other partners.

Could India's business skills improve lagging public health outcomes?

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Could a marriage of strong business and management skills with sound public health programming boost health outcomes in India and elsewhere? If much is known about how to solve public health problems, why do so many health programs in India and around the world, fail to meet their objectives? Do we have strong examples of such "marriages" improving health outcomes? And if so, what accounts for their success?

The Avahan program applies India's outstanding management and business expertise to a difficult public health challenge: preventing new HIV infections among the highest risk groups where most new infections occur. Clearly focused goals, a strong drive for results, carefully chosen extensive partnerships, and intensive use of data to monitor, manage and enhance performance enabled a remarkably fast and extensive scale-up that is achieving good outcomes.

A management team with extensive business and marketing skills and a strong record of meeting high performance targets partnered with groups already offering the relevant services. Within the Avahan partnership, grass-roots outreach workers "market" safe sex and other health-protecting behaviors to hard-to-reach clients. Up-to-date detailed data on progress are used to identify good performance, flexibly fix lagging performance and bottlenecks, and spread and reinforce good practice.

This evaluation note describes how the Avahan approach applies key business management principles to a public health challenge, and considers whether the model is replicable and adaptable to other health challenges.

The World Bank has long been a close partner with India in responding to HIV and AIDS, with three loans to support India's national AIDS Program, and extensive analytical work to understand the epidemic and its impact. The World Bank's direct link with Avahan is through David Wilson (of our Global HIV/AIDS Program) serving on the Avahan technical advisory board. This note is part of the Bank's efforts to understand how to achieve better results in HIV prevention, and to work with countries and other partners to "make the money work" through more effective HIV/AIDS responses.



Is there an example of successful use of business expertise to solve a public health challenge in India?

India's successes in telecommunications, engineering, e-business, and building a strong cadre of world class business management professionals are acclaimed around the world. By contrast, some of India's health outcomes lag: only two countries have a higher proportion of children under the age of 5 who are malnourished (low weight for age), and India ranks 137th in maternal mortality rates (UNDP, 2008). In 2002, although India's HIV prevalence was relatively low, it was estimated to have risen above 1% in 51 districts. Already an estimated 2.45 million people were living with HIV, and there was real concern that an explosive increase might be in prospect.

Could India use its advanced business know-how to improve its health care systems, delivery of core health services and health outcomes? In particular, could effective HIV prevention be implemented at scale and contain the epidemic? Business expertise is not common in public health: only about 6% of HIV/AIDS program managers of leading programs in India surveyed by the authors have a background in management. Most leaders of public health programs are doctors or government administrators; very few have training or know-how in modern project and program management. India has not taken advantage yet of relatively new offerings of health care management training by a consortium of 30 top-rated

Management Schools around the world. Schools, such as the Anderson School of Management of UCLA and Wharton School of the University of Pennsylvania have joined developing country business schools to create the Management Education and Research consortium (MERG).¹

Applying private sector business practices to improve public health services is not new. Many health services have been privatized and transformed using bottom-line performance standards to enhance customer service quality and improve

efficiency. But delivering speedy, high-quality innovative solutions in treatment and prevention should not be limited to the private sector. The development community has begun to realize the value of partnering with the private sector to deliver more effective health services, and also the value of harnessing modern management skills for delivering public sector health services. Public-private partnerships have been used to improve national health care in developed countries for decades, and have started to be used in developing countries too (Box 1).

Box 1. Healthcare Public-Private-Partnerships in India

Private providers play a very significant part in India's curative healthcare, accounting for 80-85% of doctors, 80% of outpatient visits, 93% of hospitals and 64% of hospital beds (World Bank, 2001). NGOs and for-profit businesses have stepped in to fill gaps in the inadequate public health infrastructure. A wide spectrum of Public-Private-Partnership (PPP) models are broadening coverage and providing quality services to underprivileged patients.

Contracting is common for simple services -- diagnostics, canteen, janitorial and other non-core services. Contracting-out management services can alleviate health departments' operational pressures. Having started in 1996 with a single Primary Health Center (PHC), the Karuna Trust (www.karunatrust.org) now runs 30 PHCs across Karnataka state and 9 in Arunachal Pradesh. Innovations like 24 hour operation, community-based health insurance, and a Health Management Information System (HMIS) have been introduced in these PHCs.

Alliances/Joint Ventures (JV) often leverage government infrastructure with private sector technical and management expertise. To provide advanced medical care in the poor, remote and underserved district of Raichur, the Government of Karnataka entered a JV with a private sector leader, Apollo Hospitals (www.apollohospitals.com/raichur), to run the Rajiv Gandhi Super-speciality Hospital. It has become a 422-bed state-of-the-art medical centre with several super-specialities.

Social Marketing uses commercial marketing techniques to promote desired health-seeking behaviour, often in under-served populations. Hindustan Latex Limited – one of the largest global condom manufacturing and marketing companies – through its foundation (www.hlfppt.org) has worked with various state governments and HIV/AIDS programs to couple their brand promotion and product distribution with private clinic networks and public sector advocacy and reach to promote condom use in thousands of remote villages.

Finally, *Social Franchising* builds a network of certified private sector providers to offer specific subsidised services, allowing vastly expanded reach within existing infrastructure. The Chiranjeevi Program in Gujarat is a good example (gujhealth.gov.in/Chiranjeevi_Yojana). It has used a voucher based system to greatly reduce maternal and infant mortality rates. Limited access to affordable qualified care at birth contributed to high maternal and infant mortality especially in scarcely populated tribal belts. Rather than expensive and slow expansion of public health infrastructure, Gujarat opted for a PPP in which 867 local private gynaecologists participate. For Rs.1795 (about \$40) per birth, the results are impressive. It is reckoned that half of all mothers living below the poverty line avail the scheme. Institutional deliveries have gone up in Gujarat from 54 per to 86 per cent, and by early 2009, 270,000 deliveries had taken place under the scheme. "We estimate", says Amarjit Singh, the state's principal secretary, health, "that over 1,500 maternal and 8,000-9,000 infant deaths have been averted by Chiranjeevi". Gujarat's maternal mortality rate has fallen, in three years, from over 300 to 136/100,000. (13February 09, www.deccanchronicle.com/node/15862/print)



Mother and newborn in post-natal hospital ward

¹ The MERG was incubated by the World Bank to help developing countries improve health care delivery through building health sector capacity in business practices and management training. The aim is to improve health programs in developing countries by training health directors in business management skills. The MERG focuses on national and sub-national government programs that provide treatment and prevention to poor people in developing countries.

While privately run hospitals and clinics can be more efficient than their public counterparts, they are usually more expensive and consequently not available to people with lower incomes. Programs in which public-private partnerships or private health service delivery have targeted low-income and socially vulnerable populations are generally marred by two main constraints: limited scale (they are usually done as pilots and in a limited geographic area), or where programs have grown in scale, they have taken a long time to do so. And many of these programs to serve the poor focus on treatment rather than prevention.

One program that has applied private sector management practices to scale up a public health intervention that targets marginalised groups stands out. The Avahan program is an HIV initiative funded by the Bill & Melinda Gates Foundation. Its focus is on preventing HIV transmission by targeting high risk groups -- female sex workers and their clients, men who have sex with men, and injecting drug users -- in the highest prevalence six states in India (Avahan, 2008). This is not a new program concept for India or for other countries with concentrated HIV epidemics. What is new is the way this program has used business practices typically found in high performing companies to implement its HIV prevention program.

Before exploring the business practices Avahan “borrowed” that might have made the difference, we look at the nature of the HIV/AIDS epidemic in India and how this shaped the Avahan strategy.

India’s HIV epidemic – and Avahan’s response

Avahan was conceived at a time of debate about HIV transmission dynamics in India and the character of India’s HIV epidemic. One school argued that India’s HIV epidemic was becoming (or was already) generalized. (A generalised epidemic is sustained and driven by sexual behavior in the general population, independently of transmission from high-risk groups.) Others argued that HIV in India was still clearly concentrated among high risk groups of sex workers, high risk men-who-have-sex-with-men, transgenders or hijras, clients of sex workers, and injecting drug users in the north-east (Dandona et al 2006).

This debate had significant implications for how to best program funds for HIV prevention. A concentrated epidemic calls for a rigorous and intense focus on interventions among high risk groups at the centre of transmission; a generalized epidemic requires major investments in prevention programs for the general population as well. Faced with this controversy, many programs took the conservative decision to invest broadly in interventions for the general population, as well as running some programs targeting high-risk groups.

The Gates Foundation convened an expert group to look carefully at the emerging data on the epidemic. They were

convinced that to make a difference in India’s epidemic there was an urgent need for very high coverage of sharply focused prevention programs, in the highest prevalence geographic areas, aimed at the highest risk groups and “bridge” populations (who have sexual partners in high risk groups and the general population). After consulting with the Government, Avahan was launched in 2003.

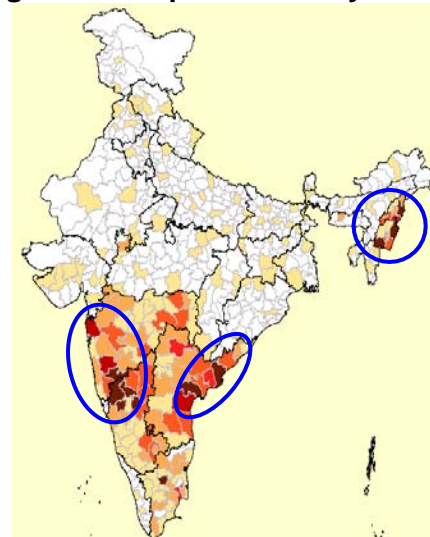
Agreeing on this clear program focus was the first and most critical step towards success. If Avahan had trod the same path as many others—trying to spread services across all of India, the results would likely be very different.

Targeting

Avahan targets female sex workers, high-risk men who have sex with men, the transgender (hijra) community, injecting drug users, and clients of sex workers. These groups and their sexual partners likely account for over 85% of HIV transmission in India (Arora et al 2004). Avahan’s geographic focus is in six states (combined population of 300 million): Andhra Pradesh, Karnataka, Tamil Nadu, Maharashtra, Manipur and Nagaland, which accounted for 83% of infections in 2002, and now contribute 65% of all new infections (Gates Foundation 2007, NACO 2008). Within the six states, HIV is concentrated in a small set of high prevalence districts in three key geographic clusters:

- The Northern Karnataka - Southern Maharashtra corridor
- The Coastal Andhra Pradesh delta
- North-Eastern India

Figure 1: HIV prevalence by district



Source: NACO, India, 2005

Setting up – clear aims, substantial funding

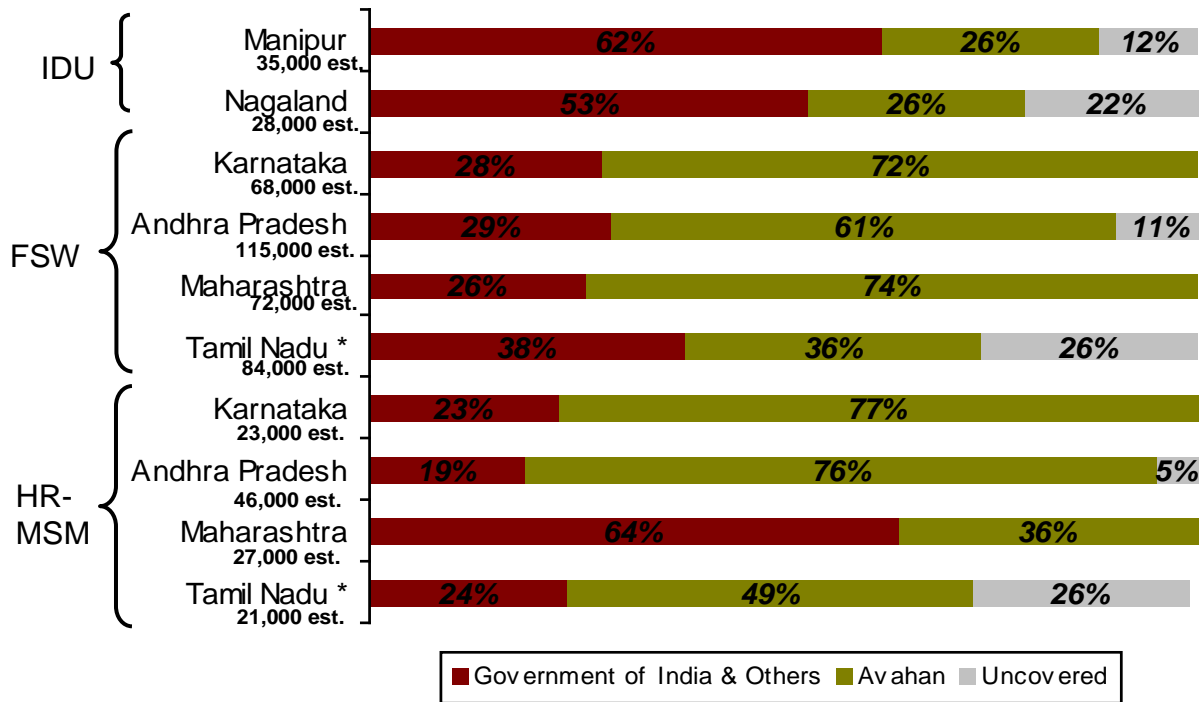
The Gates Foundation committed \$100 million to Avahan in November 2002, and \$100 million more in April 2003 as

the Avahan implementation strategy unfolded. The stated aim and scope of the project were to create a fully integrated prevention program to scale up coverage among populations at greatest risk in India's highest prevalence states, complementing government and other donor work. The latter part of this is critical -- there were already some sound programs targeting high risk groups, but few had been scaled up. Overall coverage of high risk groups was variable and low. And there were other critical gaps in the HIV prevention landscape that Avahan sought to fill, namely: 1) very little coverage or programs for high

risk MSM and transgender communities; 2) variable quality and access to clinics treating sexually transmitted infections; and 3) absence of systematic structural interventions to address issues like violence facing high risk populations.

Figure 2 shows Avahan and other program coverage at the end of 2007 after 48 months of implementation; careful joint planning ensured complementarity and greatly expanded access to services among the targeted populations.

Figure 2: Complementary HIV Programming



Percent of Mapped Urban Key Population covered**

Percentages indicate intended coverage though establishment of services in specific geographic area.
 * Includes districts with no intended coverage.
 ** Mapping and size estimation quality varies by state. Does not include rural areas.

Source: Avahan and State AIDS Control Society program data

Building the team

When setting up the Avahan program, the Gates Foundation believed that selection of its director would be one of the most important decisions. Many articles in the Harvard Business Review point to leadership as the most important factor in driving performance of organizations. The Foundation decided that the chief operating officer of Avahan would be selected for his/her leadership, business management skills, and demonstrated skill in maneuvering in the political landscape of India. Ashok Alexander was known throughout India as an innovative private sector leader with experience and know-how in finding solutions to difficult problems. A former Director at McKinsey and Company, Mr. Alexander headed its India office and had tackled scores of difficult problems facing the Indian Government, including restructuring steel companies.

Choosing a person with these qualifications to head up a public health program was unusual.

First on his agenda was to build a team with strong management experience and most importantly, problem solving skills. The team he chose to roll-out the world's largest HIV prevention program was unconventional to say the least. One of the three senior managers had been the CEO of a successful software technology company, one had co-founded a financial services investment company and the third had a global management consulting background. Avahan also recognized the need for scientific leadership to provide overall epidemiological and programmatic experience and credentials, and soon brought in a senior HIV leader. Three additional people were recruited with private sector backgrounds in

marketing and sales, consumer products, and operations. They all brought critical ingredients: a consuming passion and sense of mission, rigorous focus on tracking outcomes and meeting targets, and an intrinsic comfort with solving problems related to scaling up. Given their newness to the field they did not assume certain things often taken for granted in the public health sector -- like prolonged periods of time to set up infrastructure and find partners and generally slow implementation. Targets and indicators focused on outcomes, not inputs. For example, when reviewing progress with NGOs they did not look at how many people were trained, but rather focused on how much traffic STI clinics were seeing—the outcome they needed. Helping change purchasing and other behavior amongst rural and urban populations, locating and deploying outlets, driving towards 100% market share and meeting goals quarter after quarter without fail, were well-honed skills they brought to Avahan. And they began to employ these skills, and marketing and business strategies (see Box 2) to generate demand for HIV prevention services among their ‘customers’ who happen to be female and male sex workers, transgenders, other men who have sex with men, and injecting drug users.

From their collective experience in business they understood that new programs have a high degree of early failure. Successful ventures share similar characteristics, including developing a strong design that can be tested to ensure its appropriateness to solving the problem, flexible execution (implementation) with a “learning as we go” model, and high use of data to feed learning back into the

Recruiting Partners

A key aspect of Avahan’s strategy is to form partnerships with organizations that are already successfully implementing essential activities such as Voluntary Counseling and Testing (VCT) and providing antiretroviral treatment and other drugs.

In the first six months of operations, Avahan made major implementation grants to nine lead NGOs who would run the programs for high risk groups and clients in the six target states. These large NGOs sub-granted to about 134 grass-roots NGOs, which then worked with over 7,000 peer educators and outreach workers who became the face of the program. Figure 3 presents the Avahan organizational structure.

organization, making design and implementation modifications as necessary.

Box 2. Watches to condoms?

After eleven years working in sales for one of India’s largest watch manufacturers, Jonty joined Avahan, India’s largest HIV prevention program. Several skills from her watch selling days proved valuable in HIV prevention:

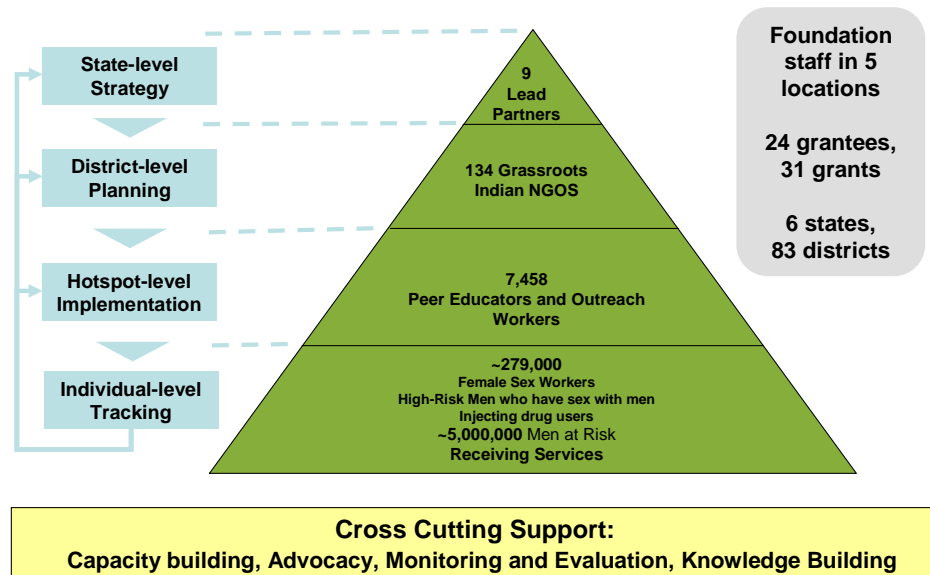
Community-centric — She had designed sales strategies with one target in mind, the watch customer, who was reference point for all decisions and policies. Now her main consumers are sex workers, MSMs and IDUs, whose needs, habits and predispositions drive the design and roll-out of her strategy.

Scale — The success of her former company’s business was dependent on its ‘footprint’ or scale of operations and ability to target the right areas. Similarly, Avahan’s success depends on rolling out a standard set of services and infrastructure at scale across the high prevalence districts with market saturation as the goal.

Integration — The “four Ps” of marketing (price, product, place and promotion) that are critical elements for a new watch rollout, also guided the roll-out of HIV commodities and services.

Flexibility — Staying ahead of the game requires constant review and adjustment of strategies. While Avahan’s basic program structure and goals stayed constant, there was a similar emphasis on monitoring and adjusting the program to meet changing needs.

Figure 3: The Avahan Organisation



December 2007 data

The roll-out

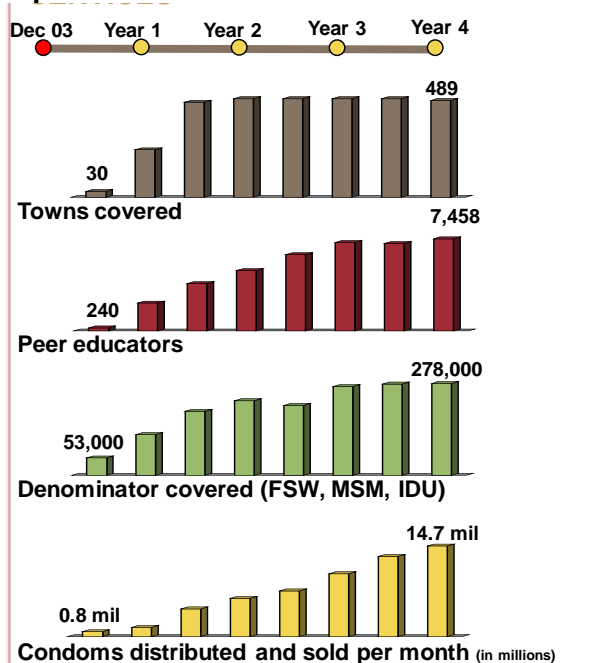
Avahan's focused prevention program offers a package of services consisting of three main elements that had proven effective in reducing HIV transmission in high risk groups:

- **Peer-led outreach and behavior change communication:** Members of the high risk communities are the ones reaching out to other high risk individuals to discuss strategies for negotiating condom use, information about STI treatment and a host of other HIV-related information.
- **Clinical services:** offered at convenient centers where key populations can be diagnosed and treated for sexually transmitted infections (STIs), rather than just being referred or advised to seek care.
- **Commodity distribution:** Distribution of condoms to sex workers, their clients, MSM and hijras as well as free needles to injecting drug users in the northeast.

Cutting across these core services, the program also focused on **community mobilization** interventions to address structural and environmental impediments such as violence, migration, mobility and barriers to accessing entitlements. These elements were critical for community buy-in to the program and stronger uptake of services.

With the agreed elements for HIV prevention in place, Avahan moved quickly to create its 'footprint'—which meant setting up a vast infrastructure of drop-in centers, STI clinics (where location proved to be key), and most importantly, its 'sales force' which eventually comprised over 7,000 peer educators and outreach workers who became the front line of service provision (figure 4).

Figure 4: Roll-out of infrastructure and services was rapid



Source: Avahan's routine monitoring data

In order to keep close tabs on the rollout, Avahan staff spent most of the first year in field visits, and conducting mapping and size estimations with partners to gather information on its market, and establish a denominator – i.e. total population needing coverage – against which it could plan and measure service uptake. It also worked with partner NGOs to make sure they were on target sub-granting to smaller NGOs, hiring staff and outreach workers, and getting their procurement systems up and running. Avahan did not pilot first and scale later, but took the approach that with the solutions largely known, in order to achieve impact quickly, it had to scale rapidly, and fine-tune as it went along. Twenty four months into implementation, 83 percent of targeted high risk population members had been contacted by a peer educator at least once.



A community meeting in Andhra Pradesh with Avahan staff

Avahan Reached Its Performance Targets

Table 1 compares Avahan with other excellent HIV prevention programs that also have contributed to checking India's HIV epidemic. The data underscore Avahan's scale and rapidity, even benchmarked against other leading programs. Precisely comparable data are not available from all 4 programs, so the authors identified basic measures of program performance and asked each program for aggregate data for each indicator from the beginning of the program until present. These rough measures show how rapidly Avahan eclipsed the scale of others. For example, it quickly established programs in 4 to 12 times as many districts, mounted 10 to 15 times as many interventions, reached 6 to 20 times as many sex workers and 20 to 80 times as many male clients, treated 4 to 40 times as many STI clients and distributed 10 to 70 times as many condoms. Avahan provides convincing proof that rapid, dramatic scale-up of prevention effort is feasible. This result is resoundingly important in Asia, where scale and coverage of known proven interventions remains the greatest challenge. Figures 5-8 show the dramatic increases in key coverage and scale indicators from the very beginning of the program's implementation.

Table 1. Avahan compared with other programs¹

Program Aspect	APAC	Avert	Sonagachi	Avahan
Time frame	1995–2008 (12 yrs)	2001–2008 (6 yrs)	1992–2008 (16 yrs)	2003-2008 (5 yrs)
No. of Districts	22	7	14	83
No. of Interventions	64	52	43	650
Current No. of listed HRG	50,600 SW, etc.	13,600 SW, etc. (est.)	34,000 SW	287,000 SW/MSM/IDU
Current No. of male clients covered	500,000 Male clients, others	300,000 (est.)	100,000 male clients/ babus	10,000,000 Male clients, truckers
Current No. of STI consult. /year	233,000	20,000 (est.)	30,000	885,000
Number of Condoms distributed annually	17 million distributed 12,000 outlets	3 million	4 million	180 million distributed 147,000 outlets

Note: HRG: high risk groups, SW: Sex workers, MSM: men having sex with men, IDU: injecting drug users
 Source: Internal Routine Monitoring data provided by each program; websites www.apacsvhs.org, www.avertsociety.org, www.durbar.org

Figure 5: Condoms Distributed Annually

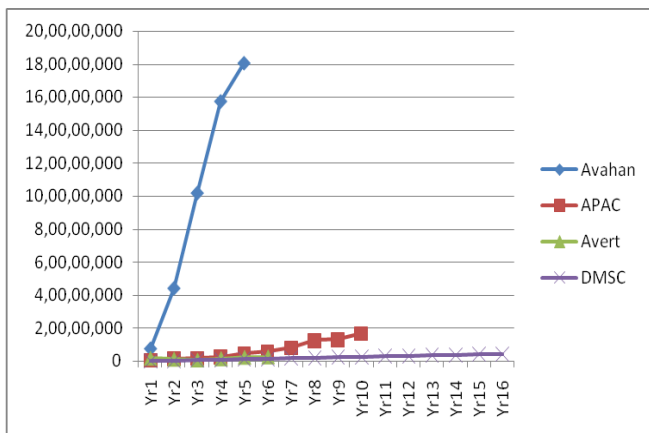


Figure 6: High Risk Group Individuals Reached

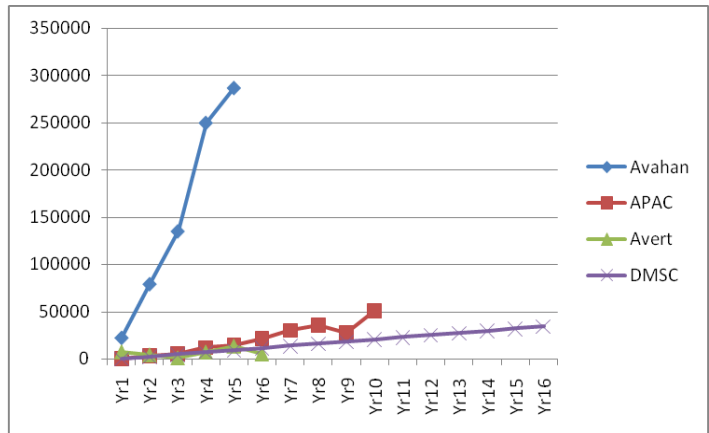


Figure 7: Number of Bridge Population Reached – Truckers, Male clients

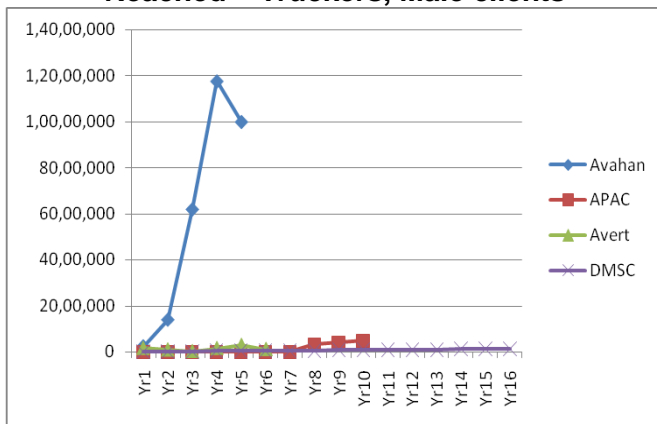
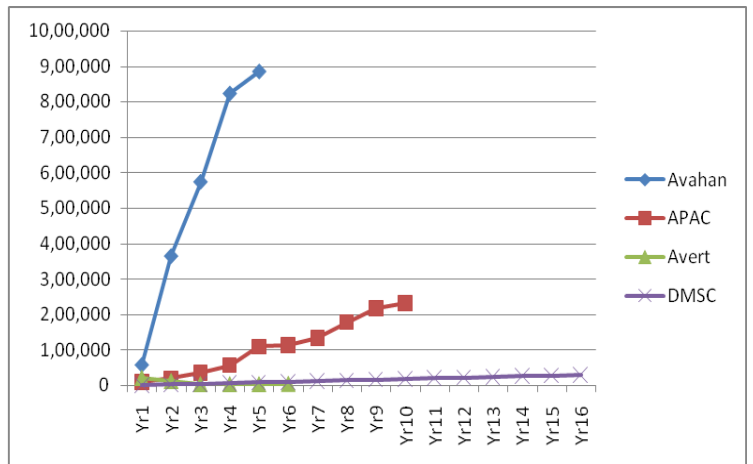


Figure 8: Number of STI Clients Serviced



(The dip in year 5 is because Avahan's male client STI programs ended in early 2008 when they were assumed within the Government (NACO) male client STI program.)

Figure 9:

A comparison of the increases in prevention service coverage achieved by Avahan with the (limited) behavioural and biological data available shows strong increases in use of condoms and reductions in STI rates in the high risk groups targeted by Avahan (Figures 9 and 10). The results are not attributable only to Avahan interventions. In particular, Avahan covers only a small percentage of East Godavri, where the Andhra Pradesh government also supports interventions. The STI decline reflects the combined effect of Avahan and Government of India interventions.

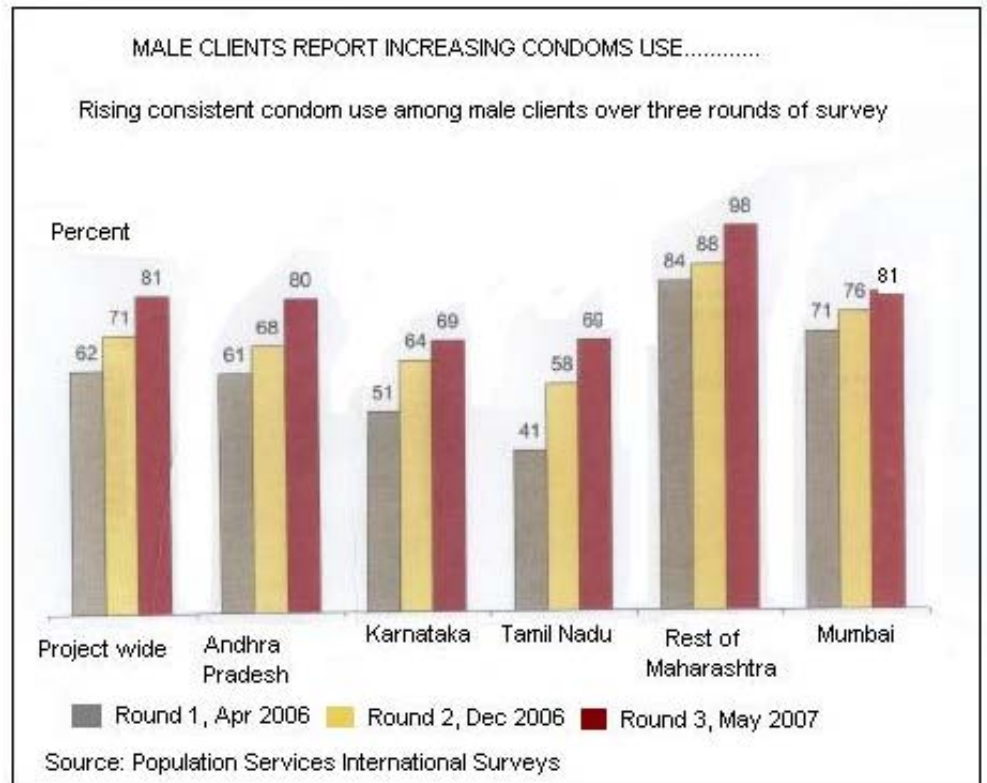
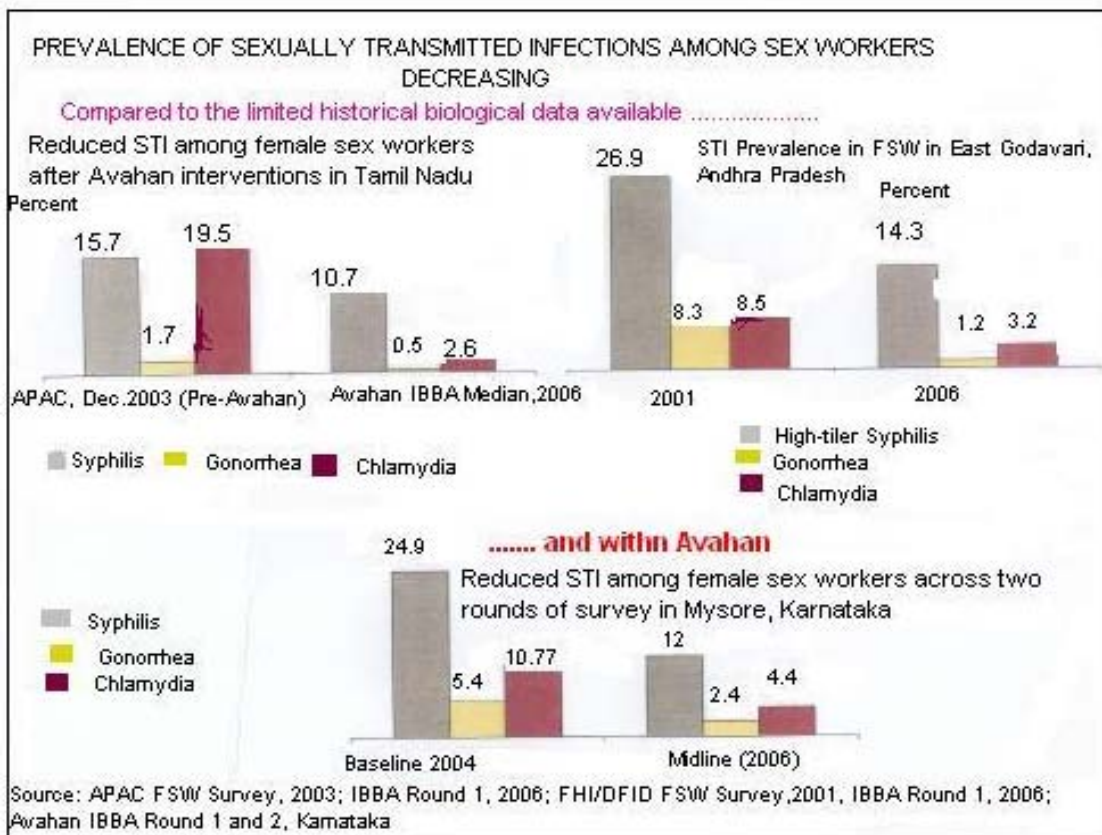
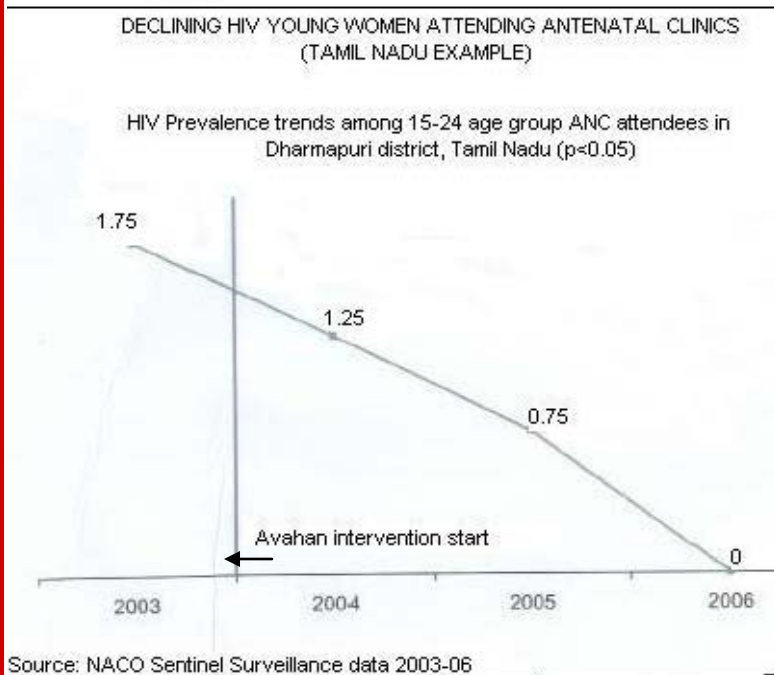


Figure 10:



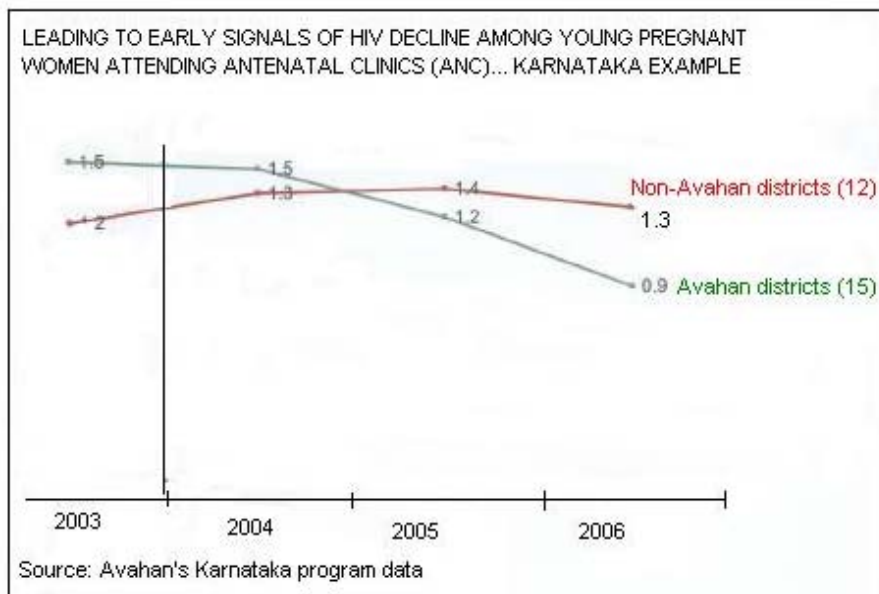
Substantiating these encouraging intermediate trends, outcome data support the hypothesis that Avahan contributed to accelerated and deepened declines in HIV transmission, shown below among pregnant women in Dharmapuri district in Tamil Nadu (Figure 11).

Figure 11:



Evidence from Karnataka state is even more impressive – it shows no clear decline in HIV prevalence among young pregnant women in non-Avahan districts, contrasted with a steep decline in Avahan districts (Figure 12).

Figure 12: Decline in HIV in young pregnant women attending ANC clinics in Karnataka – comparing Avahan and other districts



Avahan acknowledges that their initial cost structure, with its emphasis on urgency and the best personnel and partners, was higher than comparable Indian norms. They believed that an early investment in strong management was needed to establish a program that would focus on quality and give attention to hands-on implementation. These costs are being brought down as Avahan transitions the program to government ownership.

Four Elements of Success

It doesn't matter how sound the policy or how well intentioned the program is. If an organization doesn't pay close attention to management details – and how it will work on the ground—the result will be program failure. Successful programs need a little luck, but they need a lot of attention to management detail

Professor Billy Hamilton, LBJ School of Government, The University of Texas

Organizations that meet their goals and out-perform competitors typically have a number of characteristics in common. They have a clear purpose, flexible but consistent execution, use data for decision making, and are willing to admit mistakes and correct them (Rist 2005). Avahan's scale and speed distinguish it from other programs, and a closer examination shows how these four elements of success were embraced by Avahan and were integral to its implementation.

(i) Clarity on what success looks like

High-performing organizations know what success looks like and can define it simply and clearly. Avahan believed that HIV in India could be reduced substantially by rapid, high coverage, high quality implementation of targeted interventions for sex workers, men-having-sex-with-men and drug users in India's highest prevalence states and districts. Furthermore, effective organizations are able to communicate their purpose and objectives so that all members of the organization understand their role in contributing to the common purpose (often called mission). For Avahan, this extended beyond the members of the Avahan team. Unlike a traditional donor-grantee structure where the donor and grantee maintain distinct structures and goals, Avahan sought to bring all members of the implementation pyramid (the 9 lead grantees, 6 capacity building grantees and 134 grassroots NGOs) under one umbrella, creating a unified sense of mission for the entire endeavour. Figure 13 (reading from

the bottom up to the top) represents Avahan’s clear goals, strategy for attaining them, and enabling and sustaining factors. Because Avahan opted not for a general population HIV program but for strategic strong focus in geography and target populations, it was able to articulate its priorities clearly, and translate these into uniform objectives for the entire implementation pyramid.

Figure 13:



While the goal was clear, the geographical scale of what was required to rapidly reduce HIV transmission in India was no small task. Avahan clearly articulated a definition of success that required simultaneous and rapid scale up (not piloting), and a massive footprint that covered the entire geographic priority area of India’s highest prevalence states and districts (Box 3).

Given the priority placed on scaling up, Avahan correctly identified management rather than technical expertise as the most important skill set for the first phase. Recruitment focused on finding a competent manager and supervisors, each of whom was given a defined geographic area in which to work and focus on standardizing services provided by the grassroots NGOs who were the implementing partners. The early priority given to mapping and enumerating the target populations – sex workers, clients, high risk MSM, hijras and IDUs – enabled accurate targets to be set against which to measure progress. Only with an accurate denominator could all members of the project – from Avahan managers to outreach workers – know their targets, monitor their progress and adjust tactics to achieve rapid service uptake and high coverage or “market share”.

With a clearly defined standard operating procedure (the “common minimum program” explained in Box 4) and a management information system (MIS) that was simple and easy to use, a unified sense of purpose was ingrained in the program—everyone, from the director down to each outreach worker has a clear understanding of what they are there to do.

Box 3. Avahan’s Strategy

The Avahan project design involved a four-pronged strategy:

1. Simultaneous setup across regions/grantees of 3 phases of service delivery – first establishing the infrastructure, then increasing the scope and quality of coverage, and finally including additional services (e.g. community mobilization) into the core services;
2. Customizing services to client populations – adapting the standard package for local conditions to maximize uptake and coverage;
3. Addressing barriers to service uptake and generating demand – which often involved going against conventional wisdom and resulted in community mobilization becoming a key strategy;
4. Execution focus at every level using a structured management approach that combined design, data and ground reality:
 - ▶ Programming *standards* which set guidelines, minimum quality and expected milestones through the Common Minimum Program (see Box 4) which could be adapted to local context.
 - ▶ *Field engagement*. Regional deployment of people and partners enabled frequent field trips to see grassroots NGO efforts as well as government and local influencers. These were working visits to contextualize the monitoring data, understand practical implementation issues and anticipate future ones, and validate claimed successes. The Common Minimum Program even includes field engagement rules for all levels of program participants.
 - ▶ Analysis and *use of monitoring data*. Routine monthly reports are scrutinized for adherence to the planned service rollout and utilization levels. Further analysis of anomalies often uncovered program deficiencies and led to improvement. Over time, this has decentralized to peers and NGO staff to improve data accuracy and stimulate detailed local problem solving.
 - ▶ *Program reviews*. With each partner, Avahan has formal 6-monthly program reviews to assess progress, address issues and set future course corrections and milestones. Each implementation partner holds similar reviews with their sub-contracted NGOs. At an overall program level, “all partner meets” are also held to review overall and regional performance (a strong disincentive to lag behind), share best practices which can then evolve into common standards, and refine and agree program direction. The core Avahan team interacts more intensively through weekly review calls, multiple team meetings, and constant sharing of issues and solutions.

Box 4: The Common Minimum Program

The program struggled for the first year to get the multiple, diverse and spread-out entities and people in the virtual Avahan organization to work as one, until it developed and adopted its common vision and operating standards -- the "Common Minimum Program". Practical learning from the ground combined with high level priorities created a guide which encompassed:

1. **Standards** for Programmatic and Technical approaches in interventions – including STI Clinical Operating Guidelines and Standards (COGS) and guidelines and tools for all services, outreach, Behaviour Change Communication, community participation, etc.

2. **Key Project Milestones** to capture pace of infrastructure and service roll-out with desired sequence and quantitative progress or service uptake targets. These evolved, and at each stage set direction and clarified priorities across the program to drive in a common direction.

3. A common **Program Management Framework** to drive execution. This defined relationships across the extended organization, specified ownership of areas across the partners/ NGOs/ people, expectations of support and field engagement intensity, review processes, etc.

4. **Data collection for decision-making** with clearly defined tools, processes and specific metrics for data collection and analysis at all levels. These include grassroots (peer-level) to program-wide routine monitoring metrics and indicators, qualitative and quantitative assessments/ surveys, repeat mapping and denominator size estimation, condom (or needle/syringe) requirements, etc.

(ii) Consistent but Flexible Execution

Peter Drucker, the father of modern management science, once said "There is nothing so useless as doing efficiently that which should not be done at all." The design of many, if not most, development programs is based on a theory of change that is agreed upon before the program starts. Unfortunately, programs are rarely evaluated during their execution to determine if the logic of the original design remains valid and is really working. Sometimes this type of evaluation is conducted after the program has ended, but is seldom done during its execution (World Bank, IEG 2008). Thus, programs are often implemented using untested designs, with little incentive to restructure the program or change its original design despite lessons that may be learned along the way. The incentives are usually to meet time-bound targets in implementing program activities, without really knowing whether the activities help to achieve key performance targets. Avahan leadership believed in testing their design against expected goals, and did so.

The second characteristic of success is staying flexible during implementation while applying clearly defined policies and practices in a consistent manner across the program. This enables decision makers to use what they learn about what works and what does not work during implementation, to make constant program-wide improvements. The first success element stresses the importance of a clear and common purpose; this element reinforces the importance of maintaining a flexible results-focused strategy for achieving it.

The two main approaches Avahan took to ensure consistency with flexibility were (1) designing systems to guide implementation, and (2) creating incentives to reward innovation. Once implementation began, Avahan developed a set of guidelines called the Common Minimum Program (CMP) which were meant to drive priorities and share learning across all implementing partners and grassroots NGOs. The CMP is an operating manual that combines technical standards, templates/tools for implementation and key milestones for program success (see Box 4). The standards are improved and adapted to local conditions where appropriate – relying on feedback from peers' micro-planning to determine the optimal combination and intensity of services.

Examples of how the CMP enhanced Avahan's program performance abound. The following examples illustrate how customized delivery approaches and interventions enable Avahan to maximize its reach with available resources:

- ▶ Most NGOs follow the uniform STI management protocols in the STI Clinic Operating Guidelines and Standards (COGS). But the location of service points is influenced by peer input, which helps decide whether to establish fixed clinics close to hotspots, or mobile clinics in vans or tents. To cater to the constraints of sex-workers in brothels, satellite clinics are held there on pre-scheduled days. In areas with low numbers of high-risk group members, private providers are trained and contracted to provide clinical services.
- ▶ Centres to serve marginalized sex workers and MSM are nondescript (to avoid drawing adverse attention), but where it made sense, a distinct and visible brand was promoted. The 736 KEY clinics in the PSI program targeting male clients and 17 KHUSHI clinics in the TCIF program targeting truckers were uniformly branded and conveniently located for easy identification and access. The clinics that targeted male clients use a franchise model and enrolled physicians who were already seeing a high number of male STI patients.
- ▶ Avahan partners and their staff also demonstrated their commitment to flexible implementation during regular program reviews. Regular informal and periodic formal reviews were held off and on-site to

discuss implementation progress and to arrive at course corrections (Avahan 2008) and necessary shifts in implementation focus. The reviews provided lessons to be shared across the different sites, and feedback and support to parts of the program that might be experiencing implementation challenges.

In the early 1980's Tom Peters made management history with his book "*In Search of Excellence*". Focused on improving the quality of organizations, the book underscores the need to continuously improve how an organization delivers its goods and services because one cannot assume that when reforms are introduced they will "stick" or that they will remain adequate in the days ahead. Avahan's commitment to flexible management was based on a similar philosophy. By allowing their competent and committed team the freedom to test the design and innovate based on learning, and by providing strong continual management of the Avahan program with few formal chains of approval, reaching targets quickly became possible (see figure).

Achieve Results

(iii) Use of Data for Decision Making

Understanding the market it serves is fundamental to an organization's ability to meet performance goals and targets. Examples of market information questions are:

1. Who are our customers?
2. Where are they located and how can we reach them?
3. What quantity and quality of services do they want?
4. When is the best time to provide them with the services they need and want?

Customer paradigm: Avahan program managers' deliberate strategy is to treat its target populations of sex workers as customers to be sold a specific product: safe sex/safe behaviour. In implementing this strategy, consumer needs and viewpoints are central. The team worked to adapt product marketing, build brand loyalty and develop specific techniques for increasing uptake. Some time into the program, they observed that community-led programs like Sonagachi had similar power and sustainability to direct-marketing. So Avahan took the

customer paradigm one step further – and made community members, with their inside knowledge and access, an integral part of program design and execution.

Avahan's Central **Management Information System (CMIS)** plays a key role in tracking the program at all levels - from individual customers, to NGOs, up to the foundation management team. The CMIS data allow real time decision making. Performance is evaluated across all levels and quick corrective action is taken when opportunities are noted. The partners have devised innovative mechanisms for ensuring quality, using these data. For example, the Foundation that runs programs for truckers evaluates and rates its grantee NGOs in detail twice a year on seven parameters (Staff retention, Interpersonal communication, etc.) (Figure 14). Performance below 60% of target is coded red for immediate correction. Items for which performance is 60-80% are coded amber or needing improvement; things above 80% make the cut and are coded green. NGOs rated green on all seven aspects get a prestigious "GOLD Standard" certification for the year. This encourages holistic quality, and also builds motivation and self-esteem while fostering excellence through friendly competition.

At the next level, Avahan's MIS collects indicators on service provision, uptake and community activities across 134 grassroots NGOs. Aggregate data reveal the target communities' interactions with peer educators and utilization of the STI clinics. Data generated by the client community also feeds into the MIS, not just to report upwards, but to inform and prioritize outreach by peers.

Avahan's information system is distinguished from those of many public health projects in two critical ways: first, the system is designed to provide **real-time information**, to enable constant performance management and tactical changes as required. Second, it is designed primarily for **hands-on data-driven project management** rather than for just reporting upward and outward.

(iv) Willing to Admit Mistakes and Correct Them

In order to provide the right incentives for innovation, the Avahan leadership kept its eye on the impact it hoped to achieve, and maintained a "build the ship as we sail" motto to encourage managers to look closely at findings and not be afraid to try new things. This extended to relationships with grantees also. Going back to the drawing board with a grantee was not viewed as a failure, nor were they penalized for not getting the design 'right' at the outset. Rather it was viewed as requisite midcourse correction to achieve maximum impact (Box 5). In day to day operations, program managers were given incentives to remain flexible and spend a lot of time in the field looking for structural barriers impeding program uptake, closely monitoring monthly data from across the program and making adjustments where needed.

Figure 14: The Management Information System flags sub-par performance for immediate correction, and creates pride in strong performance



Box 5: Refocusing the Truckers Program – the 80-20 rule in action

The truckers program is run by the foundation arm of India's largest trucking company – Transport Corporation of India Foundation (TCIF). TCIF initially set up intervention sites at 36 locations along major national highways. Within two years, however, program data indicated that despite a national presence, critical program gaps remained. A behavior tracking survey in mid-2005 revealed that program awareness among the target population was only 12 percent and service uptake was only 7 percent. Other data revealed that approximately 40-50 percent of services were inadvertently directed at individuals other than the highest risk long-distance truckers (such as short distance truckers and other people working at the transshipment locations). The grantee partner and Avahan managers were faced with a choice: should they end the investment in this poorly performing program, or go back to the drawing board?

Realizing that there was much to gain from a successful truckers program, they stepped back, and redesigned based upon the 80-20 rule in business – 80% of all sales or profits typically emanate from about 20% of outlets.

The result was a halving of intervention sites - from 34 to 17 hubs. In addition, the team focused on improving accessibility and visibility of services at each location through intelligent placement of services. Other change created a trucker-friendly standardized interface staffed with trucker peers in all locations to increase brand recall and credibility, and the (unchanged) budget was used to intensify services in the smaller number of locations. This soon paid off: outreach/clinic services uptake doubled, condom sales increased 50%, and over 85-90% services reached long-distance truckers.

Table 2: Approximate comparative costs per person reached

Costs (estimated, nominal)	APAC	Avert	DMSC (Sonagachi)	Avahan
Total Intervention spending (direct implementation costs and associated costs for advocacy, capacity building etc)				
Cumulative Program life-time cost per registered HRG member	~\$320	~\$450	~\$300	\$418
Cumulative Program life-time cost per Bridge Group member reached	~\$30	~\$60	~\$20	\$7

Source: Public data (www.usaid.gov/in, www.apacvhs.org, www.avertsociety.org, www.durbar.org) and internal documents (routine monitoring data, budgets) provided by the respective organizations

Note: The programs' duration, scope and approaches vary. Limited data are available (especially for other entities' cost-breakdowns). Given this paper's primary focus on large, fast impact, per-capita cost over the program lifetime (rather than annual cost) was deemed most relevant. These were calculated separately for High Risk Groups (HRG – sex-workers, transgenders, MSMs & IDUs) and bridge groups (male clients like truckers, migrants, slum/street-dwellers, youth, industrial workers and Babus) because of vastly differing intervention packages and costs (much higher cost package of STI treatment, individual tracking, advocacy, capacity building, community mobilization, etc. for HRG). Costs shown are total program prevention-oriented direct intervention costs (total grant amount less estimated indirect costs – Knowledge Building, M&E and Govt. Support – and deducting Care & Support costs). Indirect costs were split between HRG and Bridge Population interventions. Per-capita costs were estimated for the latest number of people in HRG or bridge populations contacted or registered with each program.

Can sound business practices help public health programs achieve desired change faster, and at comparable cost?

Dr. Robert Childs of the Wharton School of Business believes that in order for an organization or program to achieve its goals it must pay attention to 17 elements of strategic execution. Beyond strong teams, knowledge and learning feedback, this business model has shown that good implementation determines success or failure. Avahan is closely aligned to the Wharton model through strong design focus, commitment to engaging and motivating its team, and most certainly in picking the right people for the right jobs. Avahan turned traditional management of public health programs on its head by treating management skills as the scarce resource most needed for success, and technical skills as supportive skills that could be acquired more easily. Throughout its execution, Avahan has challenged conventional wisdom on how to manage public health programs by bringing in business practices such as market research and analysis, along with traditional public health technical skills. Avahan also used strong social marketing skills, leveraging a “sales force” of the affected communities to “sell” safer sexual practices such as regular use of condoms to groups most vulnerable to contracting HIV.

Questions asked by many who have studied Avahan is whether or not it is replicable in other locations, how Avahan’s costs compare with similar programs, and whether the program’s method for achieving change and strong focus on implementation could be adapted to addressing other public health challenges.

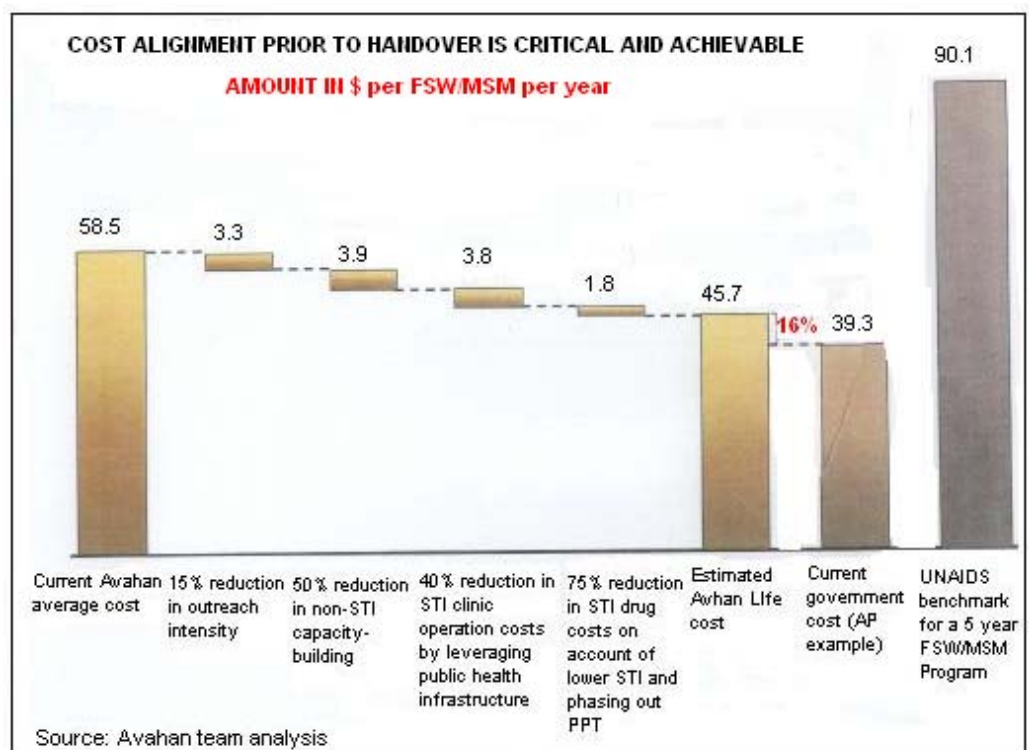
Cost comparisons

Avahan’s initial funding of \$200 million seems large at first glance; for example, most World Bank health projects are significantly smaller than this. However, the amount is not overly large for a health program in India. In 2007 the World Bank committed a similar amount through a loan agreement with the Government of India for a third HIV/AIDS program. HIV/AIDS grants to India from the Global Fund to Fight AIDS, Tuberculosis and Malaria between 2003 and 2007 total \$351 million (four grants range from \$30 to \$141 million).

Table 2 shows that Avahan’s cumulative program costs per sex worker are at the high end of comparable programs in India. As noted, Avahan invested heavily in creating a well-managed, high quality program. Also, there was early agreement that the core Avahan team would have a hands-on approach to overseeing implementation with many visits to the field. This type of implementation is more costly due to the intensity of contact and comprehensiveness of Avahan’s sex worker program, with its strong focus on rights, empowerment and community ownership as critical intervention elements. However, Avahan’s bridge group client costs are the lowest, reflecting the ability to reach large numbers of male clients of sex workers efficiently (and offering indirect support for the proposition that higher sex worker costs are a function of intervention intensity and comprehensiveness).

Having established scale-up and impact, Avahan now faces the challenge of aligning its cost structure with national norms. This is important because one of Avahan’s early goals that has not been achieved yet is to turn the project over to its natural owners, the Government of India and the target communities. This likely would require the costs to be absorbed and sustained by the national government. Avahan has shown that cost alignment is feasible, as illustrated in Figure 15. Phased reductions in the intensity and scope of intervention components could bring Avahan’s intervention cost structure quite close to government costs, based on AP’s cost structure. Avahan can achieve both rapid, early, high impact scale-up and a transition to sustainable national cost standards.

Figure 15: Potential savings identified to align Avahan costs to national norms



Beyond HIV/AIDS in India

The central questions we posed were (1) whether the business model that underpinned Avahan was the reason behind the rapid results observed, and (2) whether it would be possible to adopt and adapt these practices to address other public health problems. Avahan's achievements are impressive, and comparison with other programs suggests that the program has been able to achieve significantly greater expansion in access, behaviour change, and impact than similar programs over a similar time, and with fairly comparable costs.

There are numerous persistent public health challenges in India. Faster progress might be made by selecting other significant public health problems for which effective solutions are known, and identifying the roadblocks. Applying the four elements of Avahan's success described above, using business management practices, might help improve other health outcomes in India.



Members of MSM HIV prevention NGO

References, further information

- Arora, P, A Cyriac and P Jha, India's HIV-1 epidemic. Canadian Medical Association Journal, Nov. 2004, 171 (11); 1337-8
- Avahan: India AIDS Initiative, page on Bill and Melinda gates Foundation website <http://www.gatesfoundation.org/avahan/Pages/overview.aspx>
- Avahan—The India AIDS Initiative: The business of HIV prevention at scale. Bill & Melinda Gates Foundation. New Delhi, India. 2008. http://www.gatesfoundation.org/avahan/Documents/Avahan_HIVPrevention.pdf
- Claeson, M. and A. Alexander, Tackling HIV In India: Evidence-Based Priority Setting And Programming, Health Affairs 27 (4) 1091-1102. On line at: <http://siteresources.worldbank.org/EXTSAREGTOPHIVAIDS/Resources/TacklingHIVIndia.pdf>
- Dandona, L, V Lakshmi, G Anil Kumar and R Dandona, Is the HIV burden in India being overestimated? BioMedCentral Public Health 2006, 6:308 doi:10.1186/1471-2458-6-308
- NACO India, Note on HIV Sentinel Surveillance and HIV Estimation 01Feb08. On line at: http://www.nacoonline.org/Quick_Links/Publication/ME_and_Research_Surveillance/Reports_and_Surveys/Note_on_HIV_Sentinel_Surveillance_and_HIV_Estimation_01_Feb_08/
- Steen R. et al., "Pursuing Scale and Quality in STI Interventions with Sex Workers: Initial Results from Avahan India AIDS Initiative," Sexually Transmitted Infections 82, no. 5 (2006): 381–385.

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A member of the transgender community

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