



Private Sector Utilization of HIV/AIDS Services & Health Expenditures by People Living with HIV/AIDS in India: Findings from Five High-Prevalence States

BACKGROUND

HIV/AIDS is a critical challenge in India with an estimated 2.4 million people living with the disease in 2007 (UNAIDS/WHO 2008). A majority (65 percent) of people living with HIV (PLWHIV) live in five high-prevalence states: Andhra Pradesh, Karnataka, Maharashtra, Manipur, and Tamil Nadu (Pandey et al. 2009).

As more PLWHIV begin antiretroviral therapy (ART), the corresponding needs for regular care to monitor progression of the disease are likely to place additional burdens on the health care system. As such, it is important to understand the current and potential roles of the public and private health care sectors in meeting these needs.

The private health sector in India is large and heterogeneous, and includes for-profit providers

of varying capacity, informal providers such as drug sellers, and nongovernmental organization (NGO) providers (Gupta and Bollinger 2006). The proportion of wholly, privately run health care institutions¹ in India has grown from about 8 percent at the country's independence in 1947 to nearly 60 percent by the 1990s, and has continued its expansion (Radwan 2005). As of 2004, the private sector accounted for 80 percent of all outpatient care and 60 percent of inpatient care, with virtually no difference in urban versus rural areas (Over 2009; Sengupta and Nundy 2005) or income level (Mahal et al. 2001). The proportion of private health expenditures is also quite high with nearly 75 percent of all health expenditures borne by Indian households (Merson et al. 2004).

Currently, little information exists about the private sector's role in delivering HIV/AIDS-related services or the health expenditures of PLWHIV in India. It is important to understand the private sector's role in order to assess whether—and how—to enter into public-private partnerships to deliver HIV/AIDS-related services. To address this information gap, the Private Sector Partnerships-One (PSP-One) project examined two existing household survey datasets to gain insights on this important topic in five states with high HIV prevalence.

METHODOLOGY

To assess utilization of HIV/AIDS-related services, we analyzed data from the 2005-2006 National Family Health Survey. (IIPS and Macro International, 2007). The key indicators

¹ Radwan defines private sector institutions to encompass all nongovernmental health care (including NGOs), private clinics and nursing homes, for-profit health care institutions, registered and nonregistered medical practitioners, and donor-funded project facilities.



of interest are source of HIV testing and treatment of sexually transmitted infections (STI). We differentiated between for-profit and not-for-profit private providers where relevant. We examined STI treatment as a proxy for HIV care, because the source of ART is not available in this dataset.

To assess the health expenditures of PLWHIV, we analyzed data on health spending from household survey data collected for the United Nations Development Programme's (UNDP's) *Socio-economic Impact Study of HIV/AIDS* (Pradhan et al. 2006)².

FINDINGS

Utilization of HIV testing

Uptake of HIV/AIDS testing services remains low in India (Table 1).

Among respondents who were tested for HIV, however, at least 50 percent received the test from a private provider in all states except Manipur (Table 1). Preference for a private-sector provider for HIV testing did not vary much by gender. Furthermore, the vast majority of private sector HIV testing was conducted in for-profit private hospitals or clinics (Chart 1). Only a small proportion of men (6 percent) and women (3 percent) received an HIV test from a not-for-profit sector source or outlet.

Socioeconomic status is a key determinant of whether PLWHIV seek care and the source of

care sought. We examined the relationship between wealth and private-sector use of HIV testing using a standard wealth index based on household assets and characteristics.

In general, wealthier men and women were more likely to be tested in the private sector than poorer men and women (Chart 2). However, even the poor relied on the private sector for testing

Chart 1. Type of Private-Sector Source for HIV Test

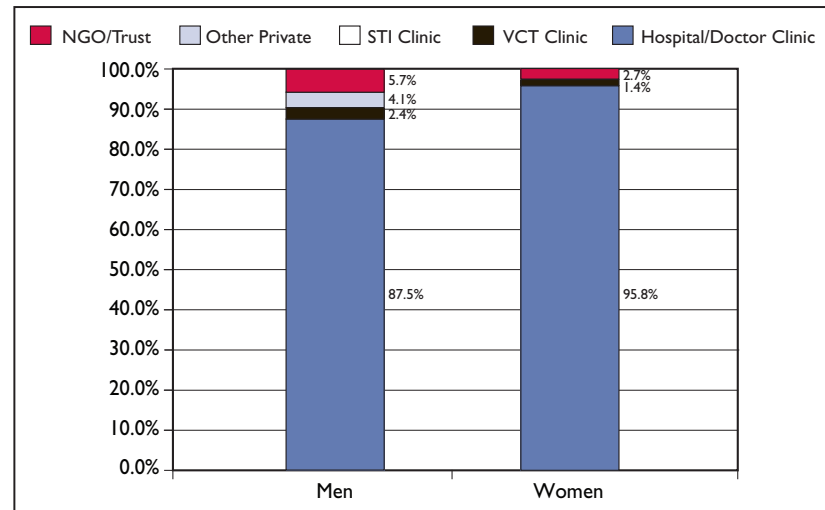


Table 1. HIV Testing by Public-Private Source

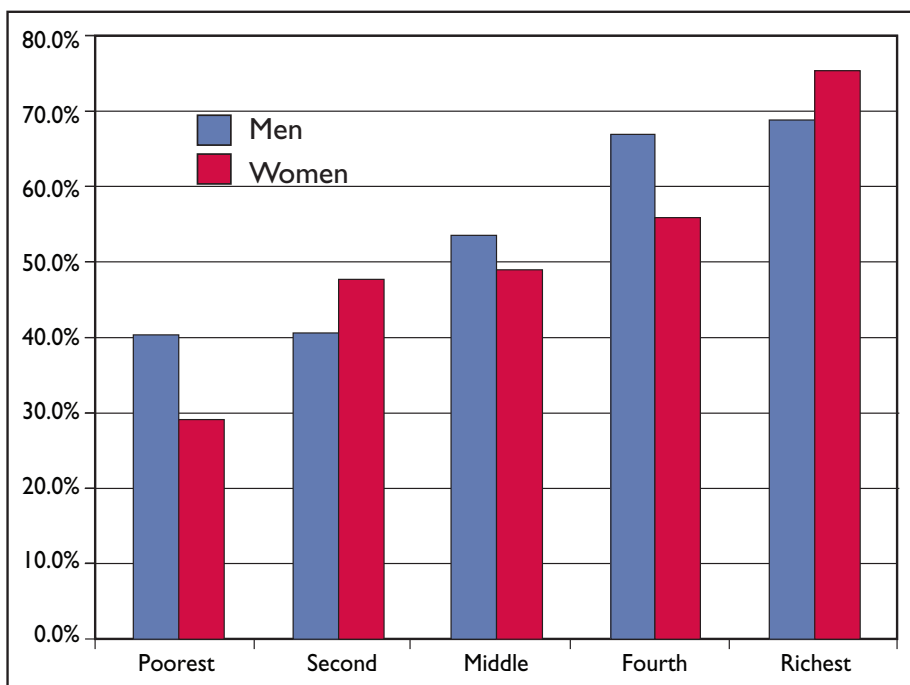
	Men			
	HIV tested	Source of HIV test among those ever tested		
		Public	Private*	Other†
All five states	6.6%	34.3%	63.5%	2.2%
Andhra Pradesh	8.3%	30.1%	68.2%	1.7%
Karnataka	4.9%	31.1%	65.4%	3.5%
Maharashtra	7.1%	34.7%	62.4%	2.9%
Manipur	8.6%	69.8%	26.6%	3.6%
Tamil Nadu	5.8%	42.4%	56.9%	0.7%
	Women			
	HIV tested	Source of HIV test among those ever tested		
		Public	Private*	Other†
All five states	8.1%	37.0%	61.9%	1.1%
Andhra Pradesh	7.9%	31.6%	67.8%	0.6%
Karnataka	8.8%	33.9%	63.6%	2.5%
Maharashtra	7.2%	32.3%	66.6%	1.1%
Manipur	8.6%	75.0%	23.2%	1.8%
Tamil Nadu	9.3%	50.7%	48.8%	0.5%

* Primarily reflects for-profit facilities

† 'Other' includes those cases that could not be classified as public or private

²The UNDP survey followed a "case-comparison" design to collect health expenditure data. Three households without PLWHAs were selected for every one household surveyed with a PLWHA. Five to seven high-prevalence districts were purposively selected in Andhra Pradesh, Karnataka, Maharashtra, Manipur and Tamil Nadu. For logistical reasons, we identified PLWHAs through state AIDS control societies and NGO voluntary testing and counseling counselors. This likely underestimates PLWHA's use of for-profit private sector services.

**Chart 2. Private Sector HIV Testing by Wealth Quintile
(Among Those Ever Tested From All Five States)**



services—about 40 percent of men and 30 percent of women in the poorest wealth quintile sought testing from a private provider in the five study states.

Utilization of STI treatment

Most men (81 percent) and women (68 percent) who sought treatment for STI symptoms did so in the private sector. The private sector was the dominant source of STI

treatment for women in all states except Tamil Nadu and for men in all states except Karnataka (Table 2). Men were more likely than women to use a private provider for STI treatment in Andhra Pradesh, Maharashtra, and Tamil Nadu. The poorest fifth of men and women were also more likely to use a private-sector source for STI treatment than their wealthier

counterparts in the second, middle, and fourth wealth quintiles (Chart 3). Women in the richest wealth quintile were more likely to use private providers than their poorest counterparts, although this was not the case for the richest men.

Virtually all men and women who sought STI treatment in the private sector did so from a private doctor or private clinic, as opposed to an NGO clinic (Table 3). Even in the poorest wealth quintile, more than 90 percent of men and women who used a private-sector source for STI treatment were treated by a private doctor or clinic. Pharmacies or compounders³ accounted for less than 0.3 percent for men and 1.3 percent for women of private sector STI care. An especially striking finding is that virtually none of the men or women who used private providers for STI treatment went to nonprofit providers. Even among the poorest fifth of men and women, nonprofit providers accounted for less than 1 percent of private-sector STI treatment.

Table 2. STI Treatment & Public-Private Treatment Source by Gender

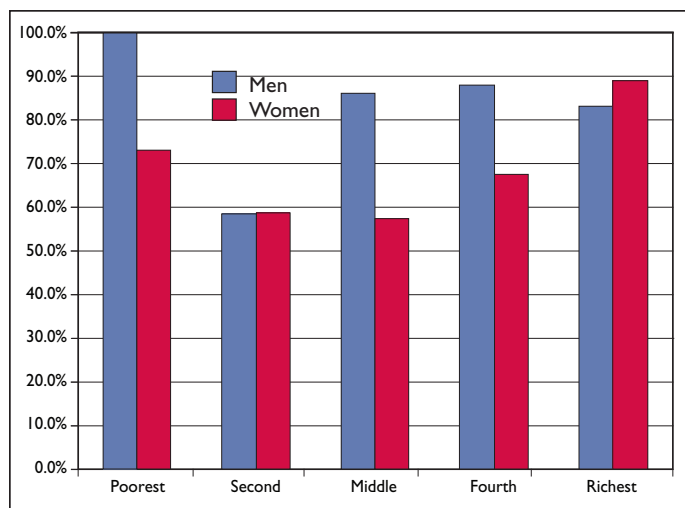
	Men			Women		
	Treated for STI*	Source of treatment**		Treated for STI*	Source of treatment**	
		Public	Private		Public	Private
All 5 states	43%	20.9%	81.1%	53%	36.8%	68.4%
Andhra Pradesh	57%	13.1%	87.9%	27%	40.6%	64.2%
Karnataka	61%	60.0%	40.0%	57%	41.4%	64.8%
Maharashtra	31%	16.8%	83.6%	54%	23.6%	79.9%
Manipur	38%	46.7%	53.2%	42%	43.9%	62.5%
Tamil Nadu	55%	24.6%	80.9%	60%	53.7%	54.3%

*Percentage of respondents 15–49 years seeking treatment for STIs (among those reporting one or more STI symptoms)

** Public or private source of treatment (among respondents 15–49 seeking treatment for STI symptoms)

³Compounders dispense medicines at health facilities. Typically, they are not trained doctors or pharmacists.

Chart 3. Private Sector Share of STI Treatment, by Wealth Quintile and Gender



Health expenditures of PLWHIV

Clear patterns by public/private source of care were apparent when we examined health spending by PLWHIV for their most recent treatment episode (Table 4). PLWHIV who used the for-profit sector spent considerably greater amounts per treatment episode than PLWHIV who used the public sector (twice as much for outpatient care and nearly five times as much for inpatient care). Average spending per episode was considerably higher for PLWHIV who used the for-profit sector than for PLWHIV who used nonprofit providers (almost three times as much for both outpatient and inpatient care). The average expenditure per episode at for-profit facilities was consistently higher than in nonprofit and public facilities in all five states except for outpatient care in Maharashtra and Manipur.

As a proxy measure of household wealth, we divided PLWHIV into three groups based on total reported household consumption expenditures⁴. These analyses showed that PLWHIV from the

poorest third of households who used for-profit providers spent considerable amounts per treatment episode in the for-profit sector (Table 5). Given Gross National Income (GNI) per

Table 3. Type of Private-Sector Provider (Proportion of Those Treated for STIs in the Private Sector)

	Men	Women
NGO/Trust	0.0%	0.1%
Private doctor* or clinic	97.5%	93.6%
Pharmacy or compounder	0.3%	1.3%
All other private	2.2%	5.1%

*Private doctor includes all medical practitioners (registered or nonregistered)

Table 4. Average Health Expenditures for Last Illness Episode (in U.S. Dollars*) by PLWHIV

	Public	For-profit	Nonprofit	Other†	Total
All five states					
Outpatient care	14	31	10	14	20
Inpatient care	30	140	50	26	67
Andhra Pradesh					
Outpatient care	17	40	4	4	18
Inpatient care	51	138	51	4	76
Karnataka					
Outpatient care	14	40	9	1	28
Inpatient care	33	122	48	63	66
Maharashtra					
Outpatient care	9	23	57	16	18
Inpatient care	27	168	47	10	80
Tamil Nadu					
Outpatient care	11	22	3	20	14
Inpatient care	18	105	8	13	43
Manipur					
Outpatient care	29	27	10	15	22
Inpatient care	66	371	66	38	81

* Note: Indian Rupees have been converted to U.S. dollars at the rate of 48 Rupees=1 U.S. dollar
 † 'Other' includes those cases that could not be classified as public or private

⁴ Household consumption expenditures are assumed to correlate with household wealth given the absence of other data.

Table 5. Average Health Expenditure for Last Illness Episode (in U.S. Dollars*) by PLWHIV From the Poorest Third of Households

	Outpatient care			
	Public	For-profit	Nonprofit	Other+
All states	11	26	5	9
Andhra Pradesh	7	30	2	5
Karnataka	11	28	7	1
Maharashtra	8	27	12	5
Tamil Nadu	6	18	2	4
Manipur	27	26	9	16
	Inpatient care			
	Public	For-profit	Nonprofit	Other+
All states	23	99	44	33
Andhra Pradesh	18	149	24	4
Karnataka	24	102	36	63
Maharashtra	25	93	47	-
Tamil Nadu	13	77	8	-
Manipur	67	291	69	-

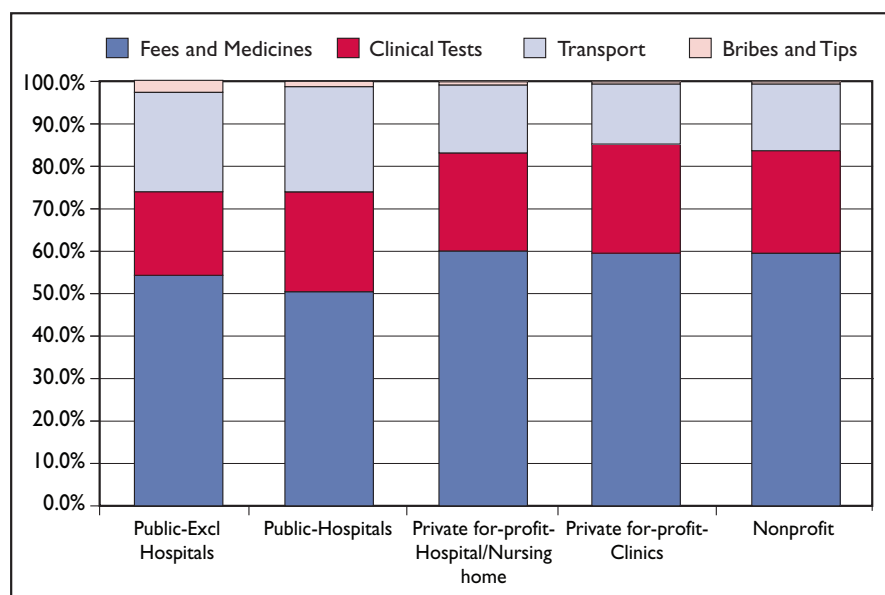
+ 'Other' includes those cases that could not be classified as public or private

capita of US \$1070⁵, average per-episode expenditures of US \$26 on outpatient care and US \$99 on inpatient care may account for a considerable portion of monthly expenditures for PLWHIV.

Fees and medicines and clinical tests were the two largest outpatient

and inpatient expenditure items for PLWHIV seeking care in the public and private sectors (Charts 4 and 5). Interestingly, transport costs were an important expenditure item for both outpatient and inpatient care across all types of providers.

Chart 4. PLWHIV Outpatient Health Expenditures by Provider Type



⁵ World Development Indicators 2009. GNI per capita is for all of India.

One possible explanation for this finding, particularly in the case of outpatient treatment, which typically requires less sophisticated provider capacity, is that PLWHIV may prefer to receive care further away from their place of residence to avoid stigma.

Few PLWHIV rely primarily on medical insurance and employer reimbursement to finance inpatient expenditures. The vast majority of PLWHIV and their families liquidated savings or assets or borrowed to finance their hospitalization expenses in both the public and private sectors (Chart 6). Urban PLWHIV were not much more likely to finance inpatient expenses with insurance or employer reimbursement than their rural counterparts. These observations also applied to the poorest third of households.

CONCLUSIONS

The findings confirm that, in these five Indian states with high HIV prevalence, private, for-profit providers are an important source of HIV/AIDS-related services, including for the poorest men and women. For-profit providers play a much larger role in delivering HIV/AIDS-related services than not-for-profit providers. The heavy reliance on the for-profit sector, coupled with high per-episode treatment costs in this sector, suggest that even the poorest PLWHIV may be spending heavily on outpatient and inpatient services. Limited risk pooling poses a heavy burden for

PLWHIV across the spectrum, pushing them to adopt distress-coping strategies such as liquidating assets and savings and borrowing to finance inpatient care. This finding strongly suggests that donors and governments should explore ways to partner with the for-profit sector to deliver HIV/AIDS-related services to the poor.

For-profit private providers in India exhibit a wide range in the quality of their services and the degree of organization—ranging from international quality corporate hospitals to nonregistered medical practitioners who operate outside the formal health sector. A critical challenge that partnership strategies must address is how to ensure that private providers' services meet quality standards and follow accepted protocols for HIV/AIDS-related services.

This challenge is clearly relevant to partnerships with private doctors or clinics—the most widely used subgroup of private providers. Scant data are available on the constituents of this subgroup in terms of qualification levels, current quality, capacity to provide HIV/AIDS-related services, and willingness to partner with governments and donors. Gathering more data on these aspects is therefore an essential first step in planning and implementing partnerships.

The heavy burden that out-of-pocket spending presents to PLWHIV points to a clear role

Chart 5. PLWHIV Inpatient Health Expenditures by Provider Type

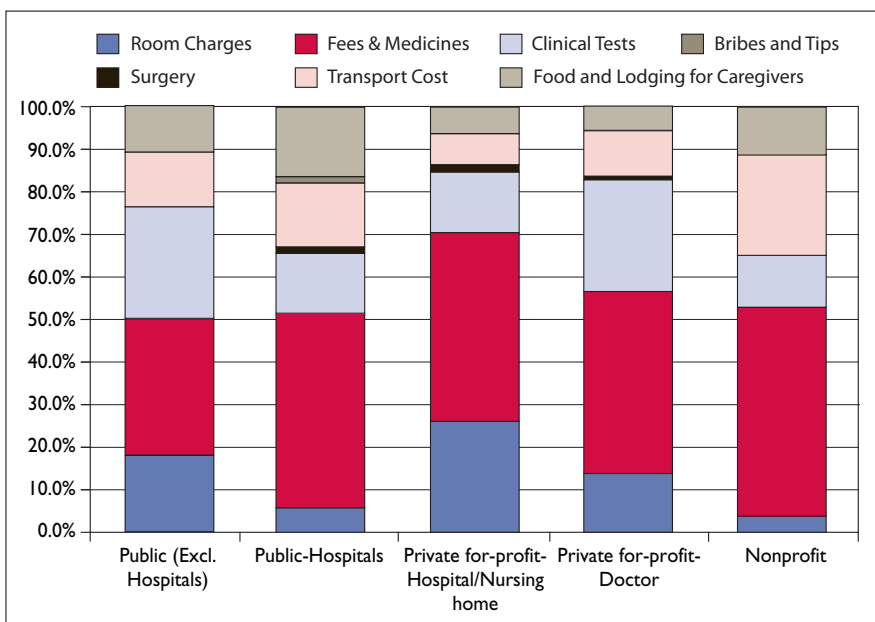
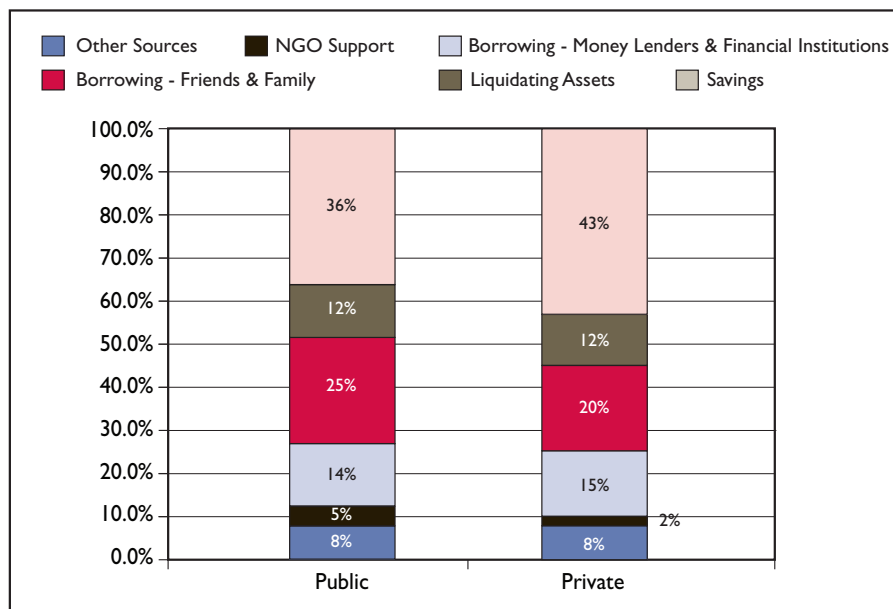


Chart 6. Source of Financing for Inpatient Care in Public & Private Sectors (Percentage of Cases)



for health financing mechanisms in mitigating the HIV/AIDS burden and in increasing access to treatment. Promising options that merit further investigation include risk pooling via health insurance and demand-side financing mechanisms via vouchers, which PLWHIV can use to access publicly subsidized

services from private providers. Demand-side financing mechanisms can also contribute to regulating and reducing out-of-pocket costs incurred by voucher clients while incentivizing providers to improve and maintain quality.

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(GNI Per Capita calculated by Atlas Method).



About PSP-One

The PSP-One project is USAID's flagship project, funded under Contract No. GPO-I-00-04-00007-00, to increase the private sector's provision of high-quality reproductive health and family planning (RH/FP) and other health products and services in developing countries. PSP-One is led by Abt Associates Inc. and implemented in collaboration with eight partners:

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