# Private sector service utilization among people living with HIV/AIDS (PLHIV) in Vietnam:

*Exploring the changes between 2005 - 2010*

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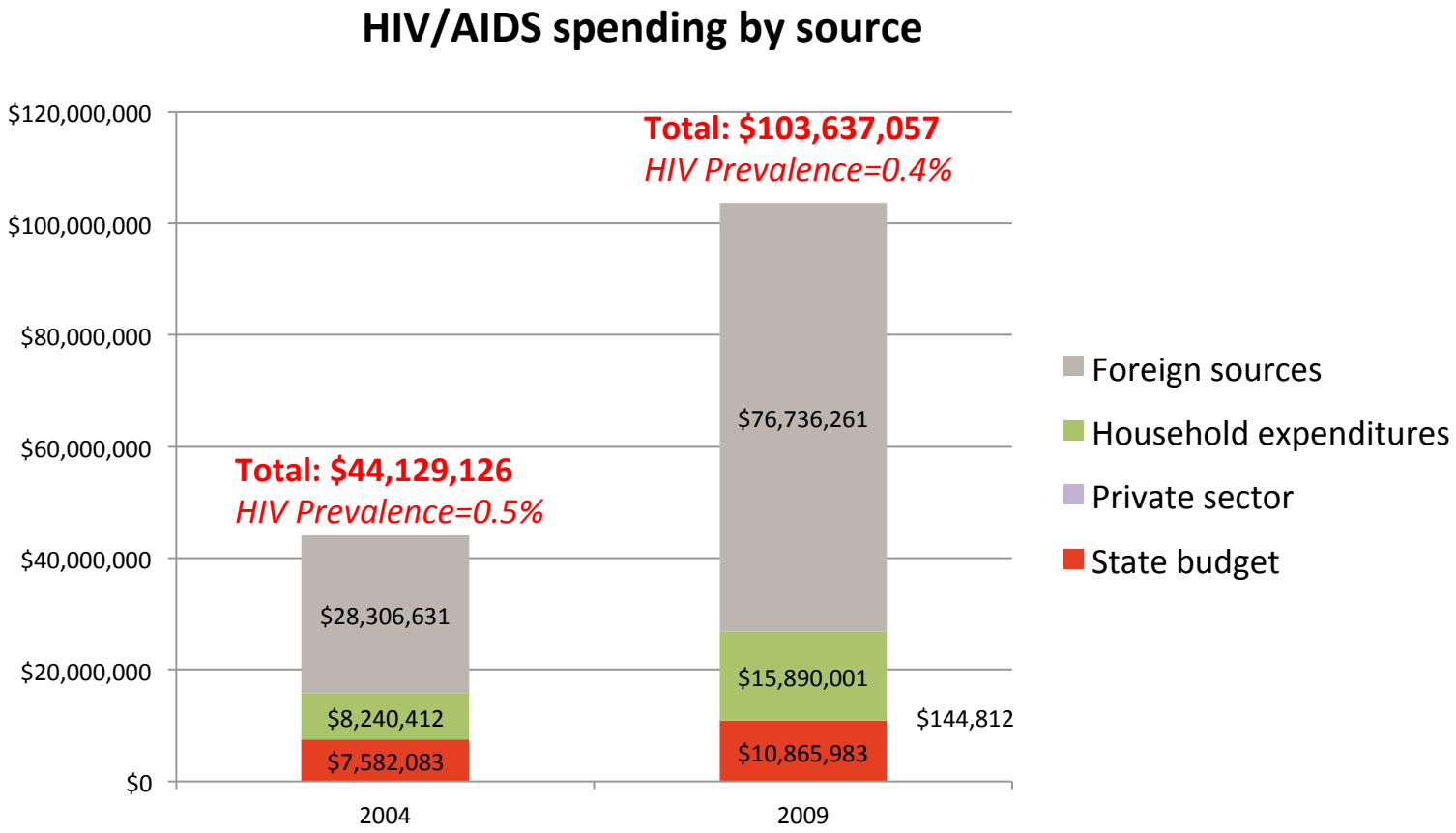
# Overview

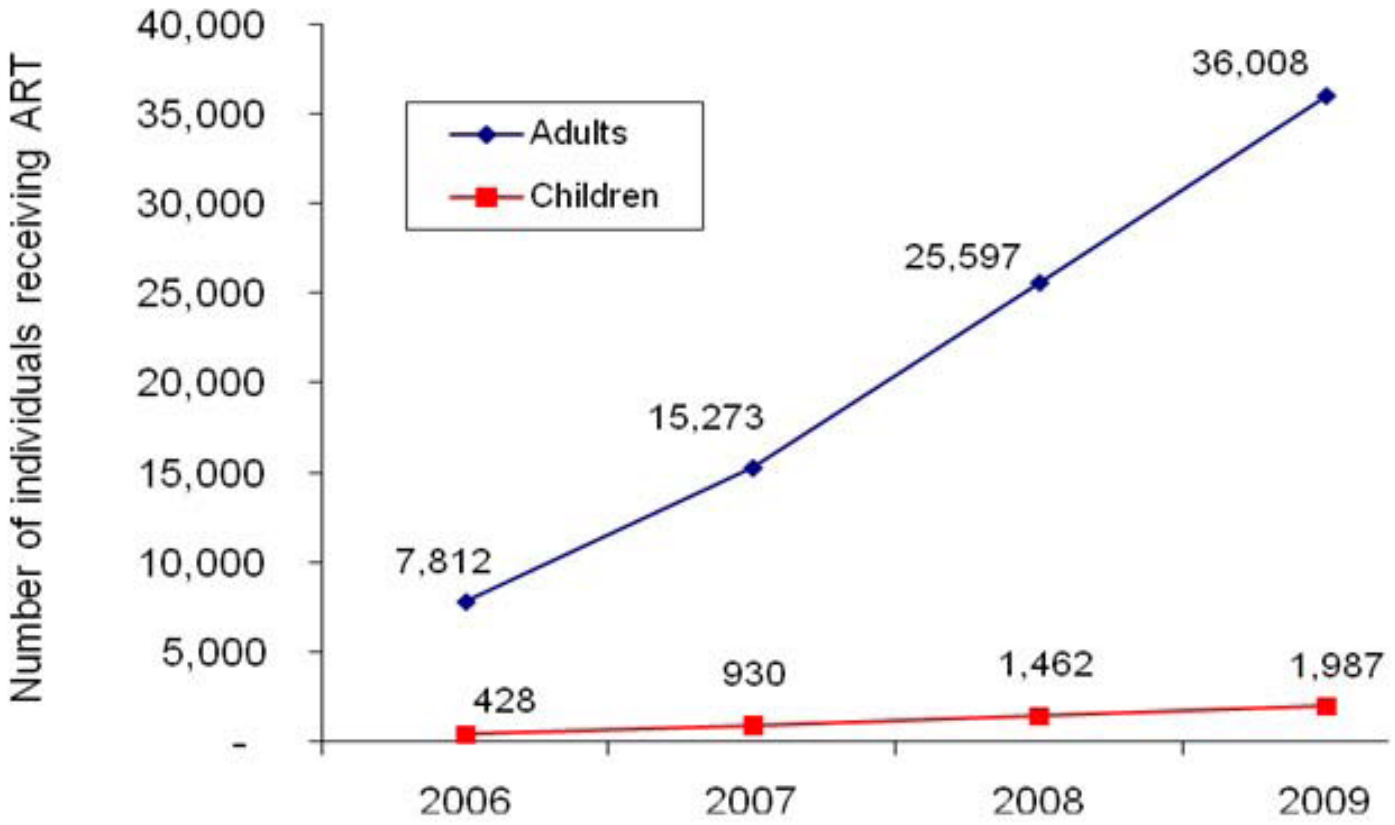
- **Background**: The changing HIV funding landscape and situation of private health sector (PS)
- **Research questions**: Exploring role of PS and how it changes over time
- **Data**: Surveys of PLHIV 2005 and 2010
- **Findings**: Current situation of PS supply of drugs and commodity and provision of services
- **Discussion**: Interpretation and implications of study findings.

# Spending on HIV/AIDS more than doubled between 2004-2009, largely due to increased donor funding




*Source: Vietnam National Health Accounts (NHA) HIV subaccount, 2010*

# Access to ART increased by more than 4 times between 2006 and 2009




Source: *Routine treatment program report. VAAC, 2009 (UNGASS 2010)*

# ART sites housed within public facilities boomed with major support from donors

## ART sites by level and funding source, 2009 and 2010

| 2009 | National funds | External funds | Total |
|---|---|---|---|
| District level | 4 | 144 | 148 |
| Provincial and central level | 48 | 90 | 138 |
| **Total** | **52** | **234** | **286** |
| 2010 | National funds | External funds | |
| District level | 73 | 164 | 237 |
| Provincial and central level | 76 | 144 | 220 |
| **Total** | **149** | **308** | **457** |

*Source: Vietnam Administration of HIV/AIDS Control (VAAC)*

# Private health sector is large and growing; role in service provision for PLHIV unclear

- PS plays a nontrivial role in service provision for general population, in particular outpatient care:
  - 35,000 private facilities, mainly in the form of clinics (vs. 13,500 public facilities) *(Vietnam Joint Annual Health Review 2009)*
  - 83 private hospitals (increase from 12 in 2000); ~3.3% all beds *(MOH Statistics Yearbooks)*
- Legal documents ban sales of ARVs in private facilities
- Free ART for PLHIV and subsidized OI treatment using government and donor funding available only in public facilities
- No clear understanding of actual situation regarding service provision for PLHIV by the PS

# Research questions

- What role does the private sector play in providing services for PLHIV in Vietnam?
- How has the role of the private sector changed between 2005 – 2010, in tandem with major increase in HIV spending from donors?

# Surveys of PLHIV 2005-2010

- Independent cross-sectional surveys of PLHIV in 2005 and 2010 conducted by Abt Associates (n=708 and 1200)
- Four-week recall of health status, service utilization and associated expenditure on HIV-related services
- Household ownership of assets -> wealth tertile
- Multi-stage sampling design:
  - Provinces selected within region/cluster (PPS)
  - Capital city and 2 districts selected (PPS)
  - Random selection of respondent at district level based on list managed by district preventive health centers
- Representative at national level

# Data limitations

- Major challenges in recruiting PLHIV for surveys; selection of respondents at district not truly random:
  - Relied on health facilities, who managed patients they treat => sample biased toward people being under treatment, e.g., receiving ART.
  - PLHIV available to participate may systematically differ from those who were not => direction of bias unclear
  - Similar situation between 2005 and 2010.

# Description of surveyed population

| Population Characteristics | 2005 | 2010 |
|---|---|---|
| Northern region (%) | 44.19 | 54.06 |
| Central region (%) | 4.98 | 6.98 |
| Southern region (%) | 50.82 | 38.96 |
| **On ARV (%)** | **12.95** | **81.68** |
| Education: Primary and below (%) | 30.40 | 19.45 |
| Education: Secondary (%) | 65.10 | 76.78 |
| Education: High school and above (%) | 4.50 | 3.76 |
| Male (%) | 73.56 | 61.45 |
| Age (year) | 29.90 | 33.28 |
| **Month since tested positive (month)** | **30.38** | **49.67** |
| **Ill last 4 weeks (%)** | **58.60** | **7.70** |

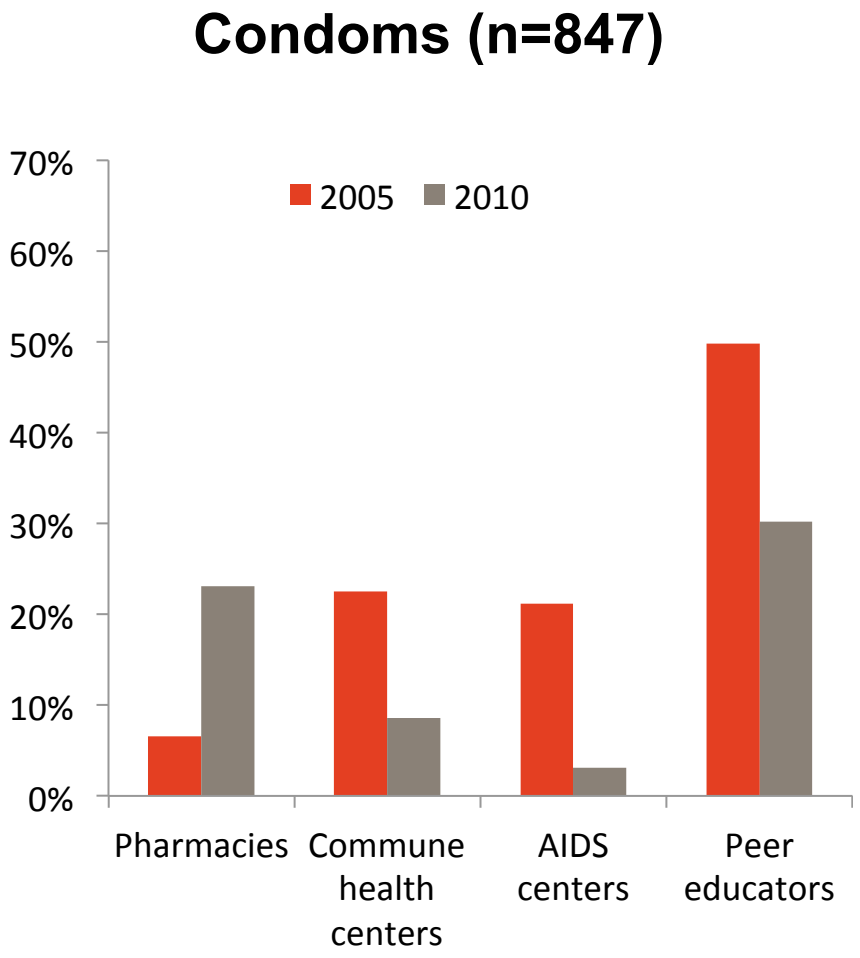
*Note: all differences between 2 years are statistically significant at p<0.01*

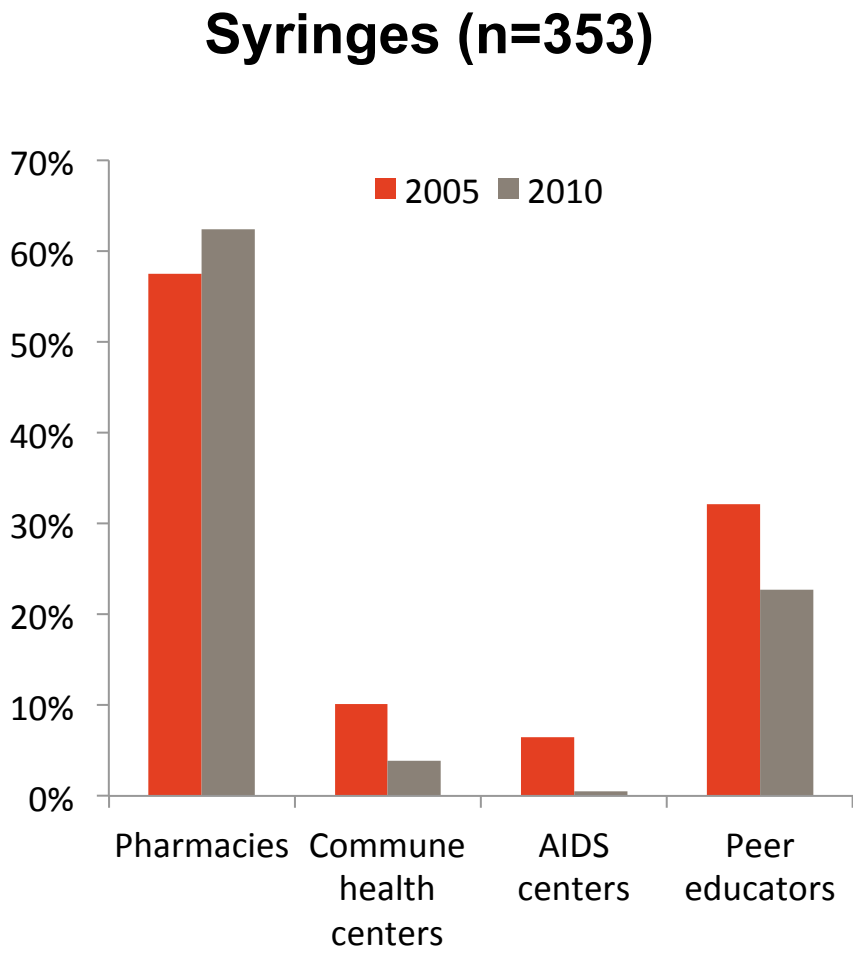
# PLHIV had more services but lower insurance coverage than general population

| PLHIV | 2005 | 2010 |
|---|---|---|
| Self medication | 39.9% | 38.5% |
| Having outpatient contact last 4 weeks | 61.5% | 73.1% |
| Having inpatient stay last 6 (12) months | 12.6% | 15.5% |
| Having health insurance | | 33.4% |
| **General population** | **2004** | **2008** |
| Having outpatient contact last 12 months [1] | 30.9% | 31.0% |
| Having inpatient stay last 12 months [1] | 7.1% | 6.5% |
| Having health insurance[2] | 22.4% | 37.9% |
| Having health insurance (2009)[2] | | 53.6% |

[1] *Vietnam Household Living Standard Surveys*
[2] *Vietnam Social Security data*

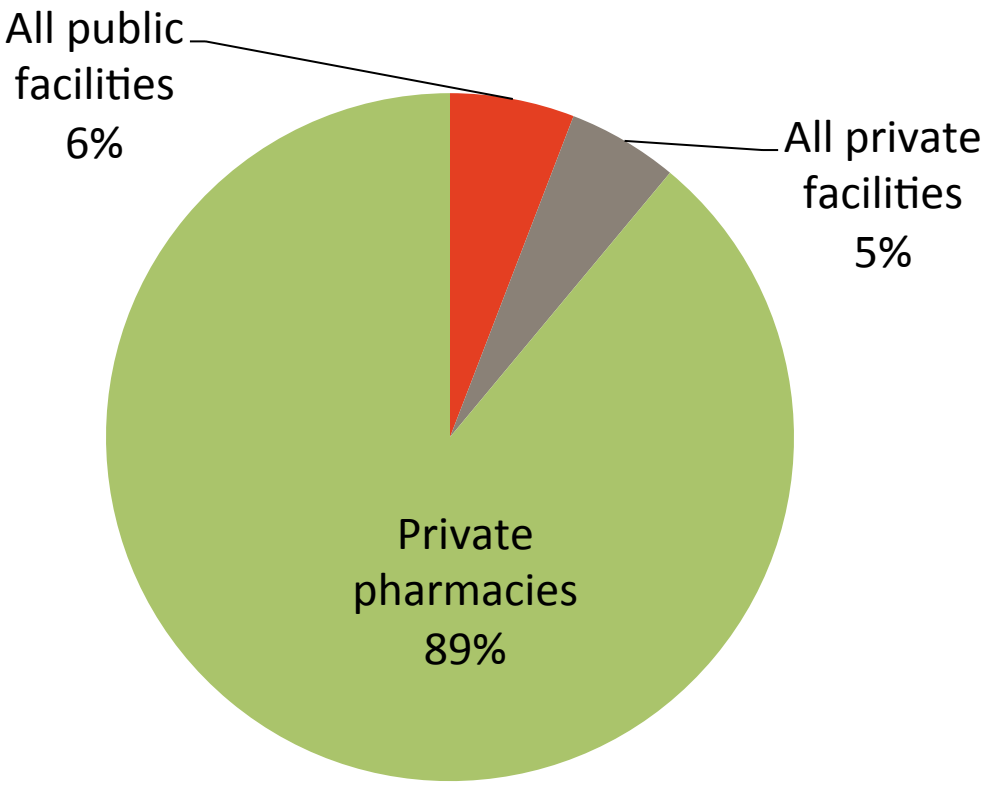
# Role of pharmacies increased as a supply source for condoms and syringes



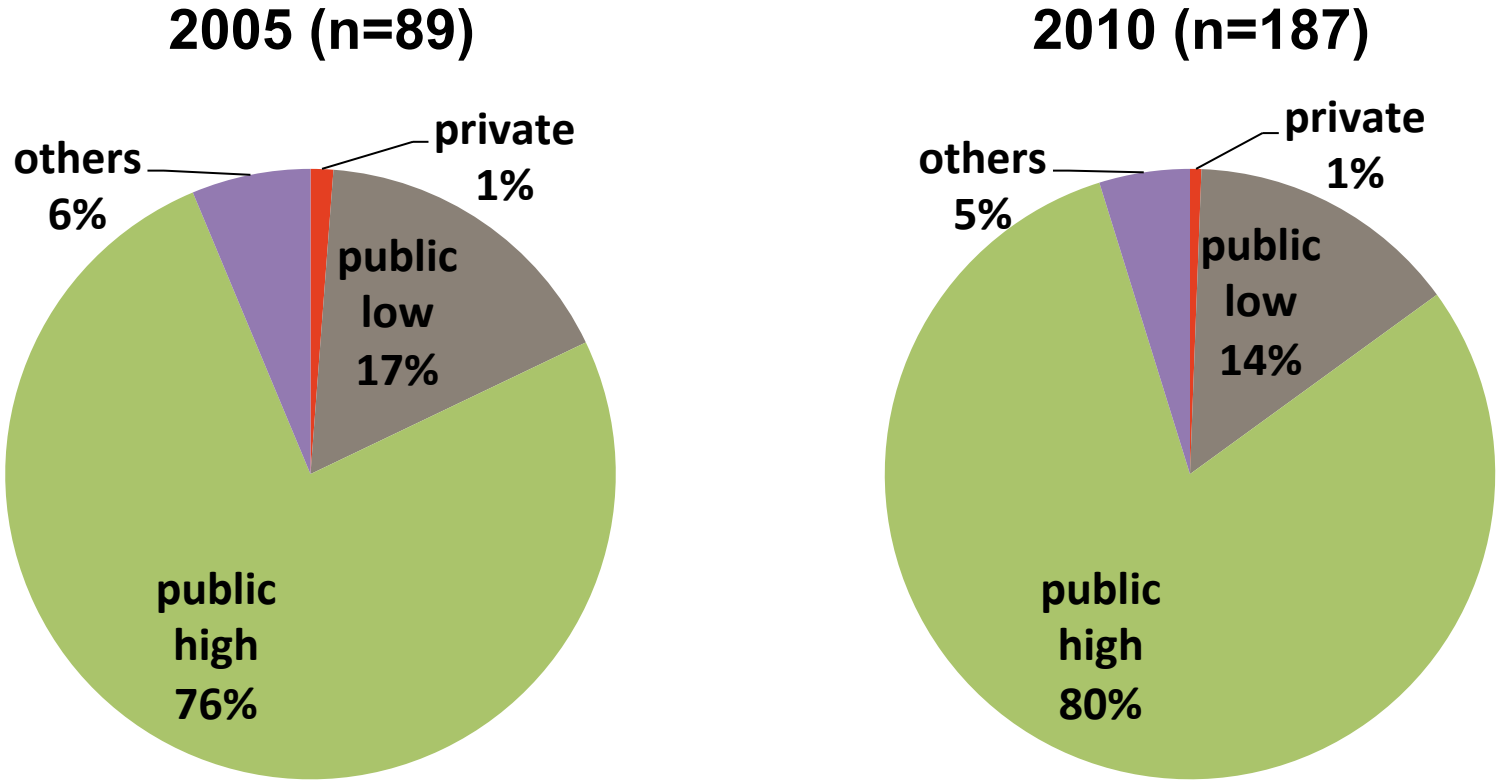



# Private pharmacies are predominant source of supply for self-medication (2010)

**Source of supply for last self-medication contact 2010 (n=458)**



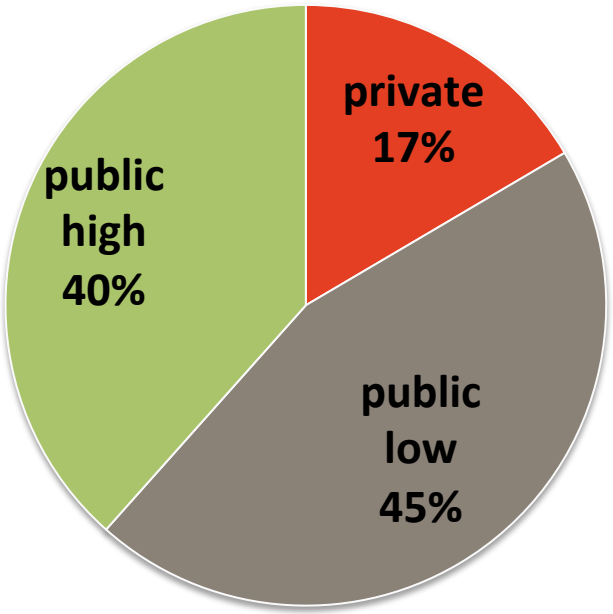
# Share of PS in inpatient service remained insignificant



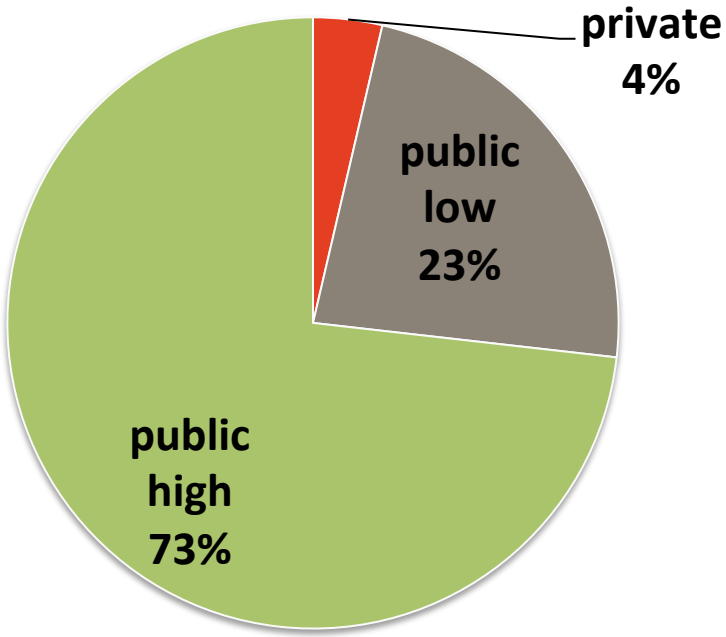

*"Private" includes for-profit clinics and hospitals. "Public low" includes public facilities at commune and district levels. "Public high" includes public facilities at provincial and central levels.*

# Share of PS in outpatient service reduced by 4 times during 2005-2010

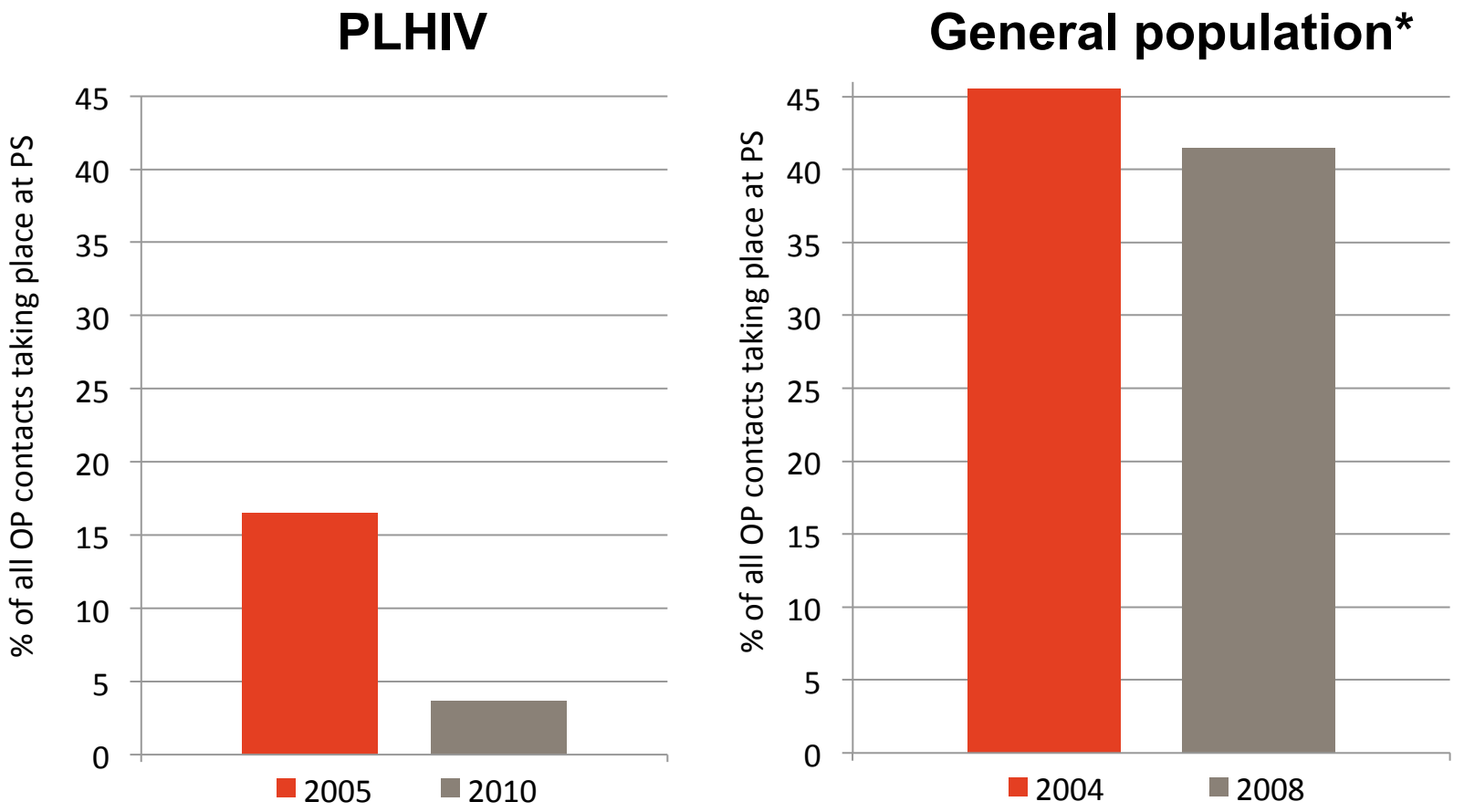
**2005 (n=802 contacts)**




**2010 (n=1167 contacts)**

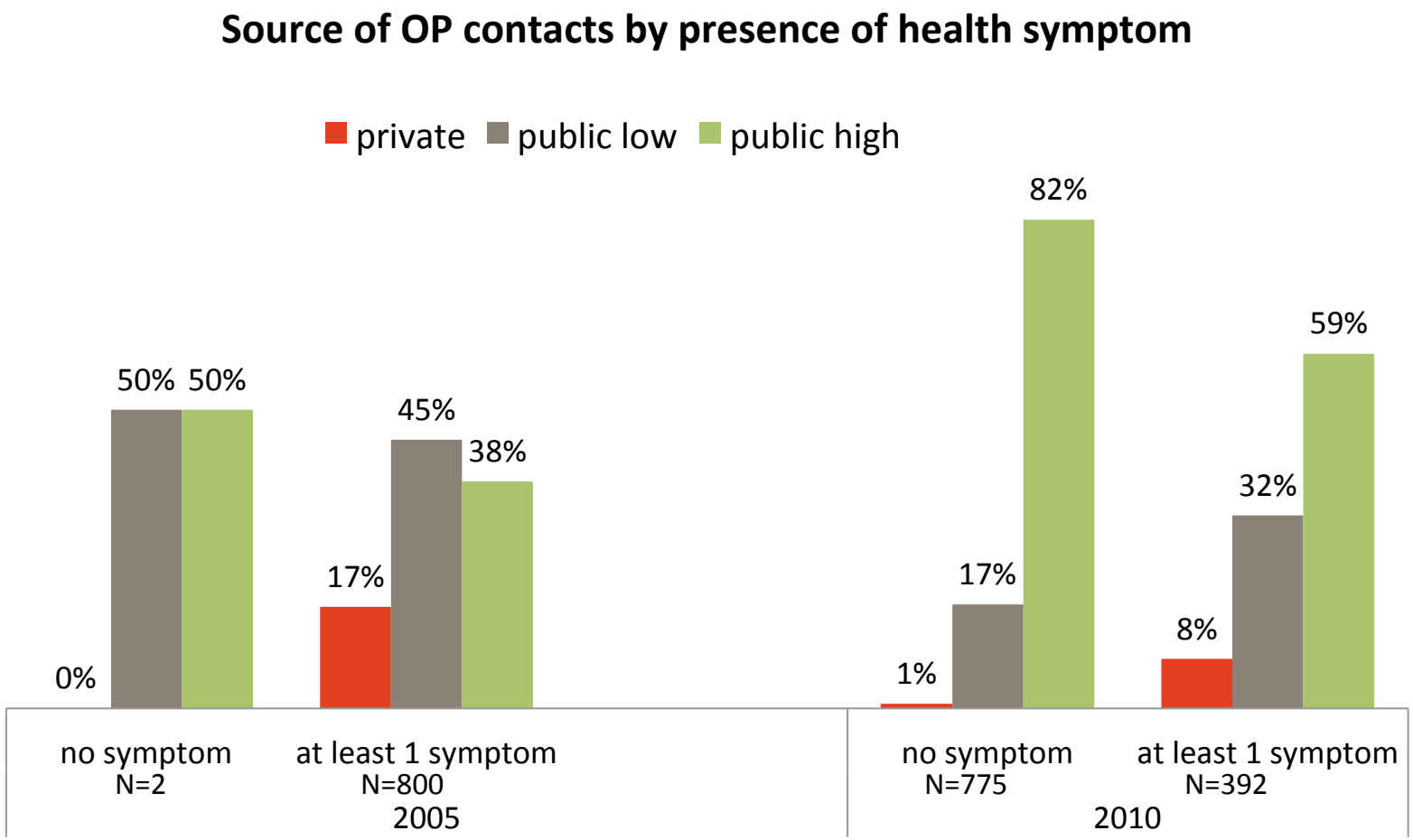


# OP share of PS among PLHIV was smaller & reduced faster than among general pop.

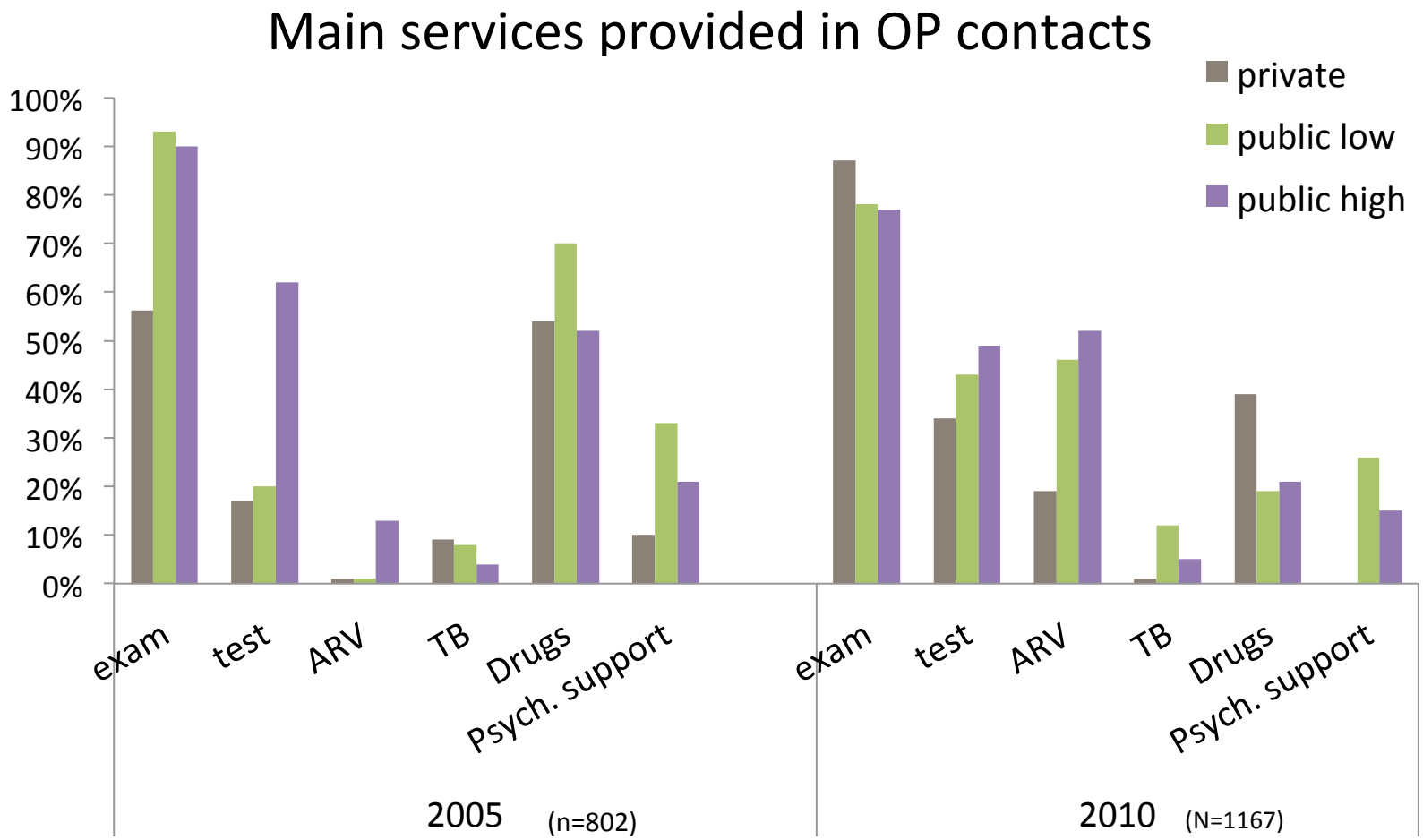



**Source: Vietnam Household Living Standard Surveys*

# OP use of PS is higher among patients with at least 1 health symptom



# PS mainly provided exam, test, drugs, and ARV (2010)



# Likelihood of choosing PS is significantly lower than public high, but not different from public low in 2010 vs. 2005

| | Public low level | Public high level |
|---|---|---|
| Year 2010 | 0.68 (0.34 – 1.37) | 2.80 (1.33 – 5.89)*** |
| On ARV | 0.78 (0.44 – 1.36) | 1.83 (0.99 – 3.37)* |
| Ill last 4 weeks | 0.47 (0.25 – 0.86)** | 0.61 (0.31 – 1.20) |
| >1 symptoms | 0.70 (0.43 – 1.15) | 0.83 (0.49 – 1.41) |
| Month since tested positive | 0.99 (0.98 – 1.00)* | 1.00 (0.99 – 1.00) |
| Education: secondary | 1.90 (0.99 – 3.62)* | 1.39 (0.70 – 2.78) |
| Education: >= high school | 1.46 (0.41 – 5.18) | 1.45 (0.42 – 4.97) |
| Central region | 21.94 (2.57 – 187.33)*** | 8.57 (0.98 – 74.89)* |
| Southern region | 2.04 (1.20 – 3.46)*** | 0.78 (0.44 – 1.40) |
| Male, age, wealth | Not sig | Not sig |

*Base choice for comparison is "Private." Figures are Relative Risk Ratios and 95% CI obtained from multinomial logistic regression. *** p<=0.01; ** p<=0.05; * p<=0.1. sample includes people with at least 1 symptom (N=1192)*

# Summary of main findings

- PS plays a significant role in supplying condoms and syringes for PLHIV, drugs purchased over-the-counter (2010), while negligible role in inpatient care;
- The role of PS in outpatient service for PLHIV is small and reduced over period 2005 – 2010, particularly in comparison with public high level;
- Choice of PS is higher among patients with at least 1 health symptom;
- Main types of services provided by the PS included exam, test, drugs, and ARV (2010).

# Discussion

- Possible reasons for observed trends in PS use:
  - The samples are biased toward people accessing public services;
  - The increasing availability of ART and subsidized OI treatment services for PLHIV is virtually exclusive to the public sector.
- Questions for discussion:
  - Is exclusive investment in public sector for ART and OI treatment an optimal solution in terms of efficiency and accessibility?
  - What is the opportunity cost in widespread expansion of ART sites within public facilities, especially high level?
  - What are cost and quality concerns when private practitioners provide ARV at cost against regulations?
  - Can private facilities be accredited to provide selected services for PLHIV at subsidized price, like the public facilities?