

# COST-SAVING OF INTEGRATING HCV TESTING INTO HIV TESTING PROGRAMS FOR PWID USING RESPONDENT-DRIVEN RECRUITMENT

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## BACKGROUND

- To eliminate HCV, it has been suggested that 90% need to be diagnosed and 80% treated
- PWID bear a disproportionately high burden of HIV and HCV infection with poor levels of awareness
- Network-based strategies are being advocated to identify HIV-infected PWID not engaged in care
- Most HIV programs tend to focus primarily on identification of HIV infections only; they do not routinely screen for other infections
- We evaluated the cost savings of incorporating HCV testing into a large respondent-driven sampling (RDS)-based HIV-focused serosurvey across India

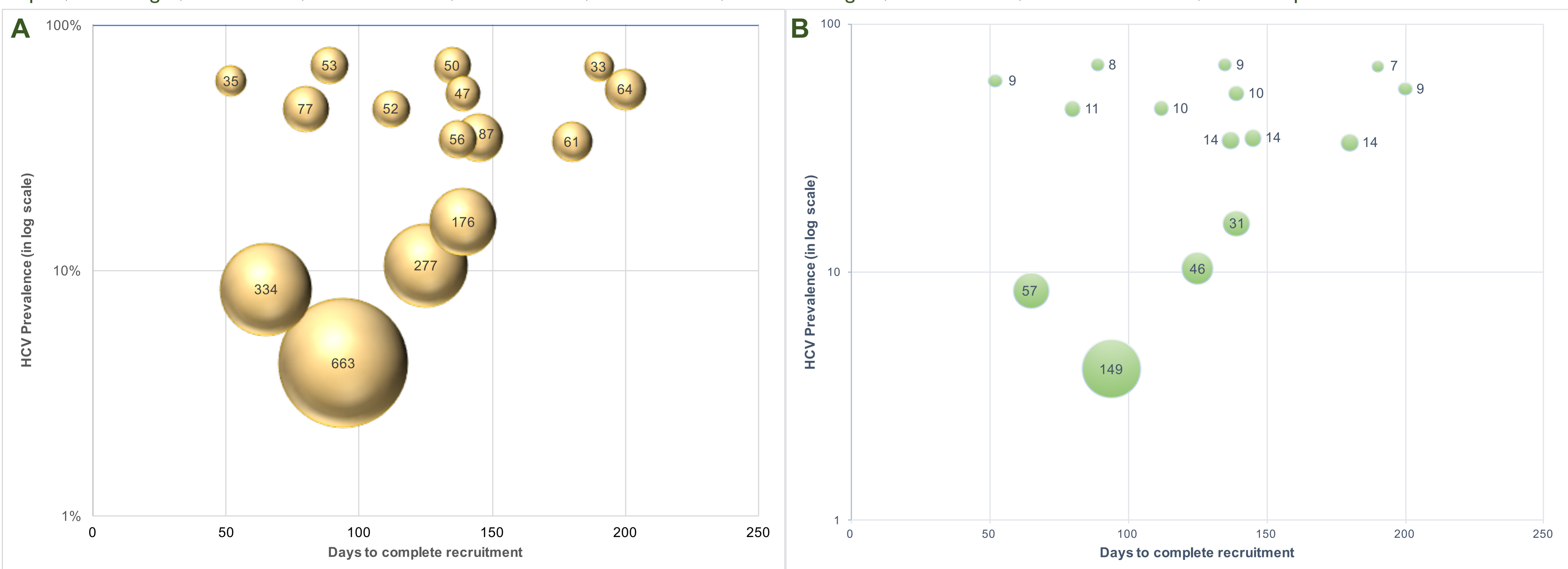
## METHODS

- Between September 2012 and December 2013, we recruited 14,481 PWID across 15 sites in India (n~1000 per site)
- For estimation of costs we tabulated costs associated with 1) site operations (e.g., rent, infrastructure, staffing, electricity, communication); 2) participation in the RDS (e.g., compensation for time, RDS incentives), and 3) market pricing for tests
- Research costs (investigator salaries, travel, sample storage, etc.) were excluded
- Cost per person with outcome was calculated by dividing the total costs associated with a site by number of persons with outcome identified at the site
- We estimated the costs of implementing the HCV screening program both independently (infrastructure, staffing, RDS-associated costs and laboratory testing) and by integrating with HIV testing (only HCV laboratory costs)

## RESULTS

	Northeast Cities							North or Central Cities							
	AIZ	CCP	DIM	GTK	IMP	LGL	MOR	DEL	MUM	AMR	CDH	LUD	BBE	BIL	KAN
Total number recruited	1000	1000	1000	1000	1000	1000	457	999	999	999	996	1000	1000	1000	1000
Recruitment time (days)	135	52	125	94	89	139	80	112	145	139	200	137	65	180	190
Prevalence of HIV unaware (%)	9.8	16.8	4.3	0.8	18.1	3.1	17.7	13.5	4.7	13.8	10.0	16.7	1.7	12.5	34.3
Cost per HIV unaware identified	230.0	83.4	550.1	2071.7	145.3	694.9	153.5	139.0	516.6	130.8	297.9	85.4	1317.4	126.3	50.8
Prevalence of HCV unaware (%)	54.3	52.8	10.2	3.2	58.0	14.9	41.6	44.8	33.3	48.1	53.9	33.6	8.1	33.3	67.3
Cost per HCV unaware identified	49.9	35.2	277.2	662.6	53.2	175.6	77.0	52.2	86.8	47.0	64.0	56.0	333.6	61.1	32.8
Additional cost per HCV unaware	8.52	8.76	45.8	149.3	8	31.3	11.2	10.3	13.9	9.62	8.62	13.8	57.1	13.9	6.9
Prevalence of HCV viremia	58.0	47.1	8.8	3.5	55.4	12.9	37.4	37.0	27.6	42.1	43.4	27.3	7.2	28.9	56.7
Cost per HCV viremic identified	164.8	164.8	439.5	722.9	179.3	324.6	207.7	186.4	230.8	178.5	205.8	194.1	491.9	185.9	158.4
Additional cost per HCV viremic	125.9	135.1	170.7	249.4	131.8	157.6	134.1	135.7	142.8	135.7	136.9	141.8	180.9	131.2	127.5

**Table I. Cost per PWID with outcome of interest identified.** All costs listed in USD; AIZ: Aizawl; BIL: Bilaspur; CCP: Churachandpur; DIM: Dimapur; GTK: Gangtok; IMP: Imphal; LGL: Lunglei; MOR: Moreh; DEL: New Delhi; MUM: Mumbai; AMR: Amritsar; CDH: Chandigarh; LUD: Ludhiana; BBE: Bhubaneswar; KAN: Kanpur



**Figure 1. Cost of identifying unaware HCV infected PWID in India using RDS.** Panel A: Cost (in USD) of identifying an unaware HIV infection at each site incorporating implementation and testing costs; Panel B: Additional cost (in USD) of identifying an unaware HCV infected PWID.

## CONCLUSIONS

- RDS is an efficient way to identify unaware and viremic HCV-infected PWID with the potential to transmit HCV to others, particularly in communities with high HCV burden and strong interconnectedness
- Incorporating HCV testing into HIV programs was associated with minimal additional costs particularly in high prevalence cities

## ACKNOWLEDGEMENTS

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