

Evaluation of Impact and Effectiveness of HIV
Rapid Testing Services Provided by MSM
Community-Based Organizations Based on
Individual Case-Studies

China Male Tongzhi Health Forum

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Thanks: (community organization is ranked according to the city where the first English alphabetical order)

The following community group provides survey case, to express sincere thanks.

Anhui JianghuaiTongxin Working Group

Changsha Zhongda Sunshine Working Group

Chaoyang Chinese AIDS Intervention Working Group

Chongqing Tongxin Working Group

danlan.org

Guangzhou Lingnan Fellows Health Support Center

Heilongjiang Kangtong Working Group

Henan Three Grains Working Group

Jiangsu Rainbow Volunteer Working Group

Nanning Greentown Working Group

Shanghai Qing'ai

Shanxi Landian Working Group

Shanxi Tongkang Working Group

Tianjin Dark Blue Working Group

Mianyang Homo Care Working Group

Kunming Choi Wan sky Working Group

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(1) Policy

- Ensure participation of MSM CBOs in the AIDS response through policy and legal guarantees
- Establish platforms for dialogue and cooperation
- Formulate a scale-up strategy
- Establish a workable model for government service purchase
- Implement funding to support expansion
- Improve monitoring and evaluation mechanisms

(2) Strategy

- Government funding
- Capacity-building plan
- Scale-up
- Network formation
- Monitoring and evaluation

[Appendix 1] Case-Study Template

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Foreword

Following its close collaboration with WHO on “Operational Guidelines for the Provision of HIV Rapid-Testing by MSM Community-Based Organizations”, the China MSM Health Forum (hereafter referred to as “The Forum”), received funding and support from UNAIDS to implement the current “Evaluation of Impact and Effectiveness of HIV Rapid Testing Services Provided by MSM Community-Based Organizations”, which it initiated in February 2012.

After more than seven months of effort, during which the Forum has collected and analyzed twelve rapid testing case-studies from MSM community-based organizations (CBOs) across China, as well as a further four case-studies that were not included in the final study, the Forum is proud to share this evaluation report, which has benefited from an extensive process of consultation and revision.

The report takes the individual case-studies as its focus, and relies on qualitative and quantitative data to make a thorough analysis of the impact and effectiveness of HIV rapid-testing services provided by MSM CBOs. Furthermore, the report uses service provider experiences to summarize the conditions that are needed for rapid-testing scale-up, and makes specific policy and strategy recommendations on how CBO-based rapid testing could be expanded in China.

This report has been enriched by the contributions of MSM CBOs and members of the Forum, who were repeatedly consulted during the evaluation process. We wish to express our warm thanks to each group that provided a case-study, as well as to anyone who offered feedback on earlier drafts of the report!

Current UNAIDS staff members, Nana Kuo, Chen Zhongdan and David Shallcross have also provided unstinting support and guidance to this evaluation, and their comments have been instrumental in ensuring the overall quality of this report. The Forum thanks them for their generous input.

We hope that this report will serve as a useful reference to the government’s AIDS response for the MSM community, and that, in the post-Global Fund era, it will inspire the government to deepen its commitment to the policy of community engagement, explore sustainable models for government purchase of CBO services, and ensure the effective investment of state funding.

China Male Tongzhi Health Forum

November 2012

Executive Summary

Aim: To carry out an evaluation of key areas relating to the effectiveness and impact of MSM CBO-based rapid testing services, so as to provide evidence for government purchase of services from CBOs and to put forward practical suggestions for scale-up.

Methods: Collect and assess CBO case-studies using a standard template; compare and analyze data contained in the case-studies to carry out a qualitative and quantitative evaluation of the impact and effectiveness of MSM CBO-based rapid-testing services.

Results: Among the 16 case-studies representing 15 different Chinese cities that were submitted, 12 case-studies met study inclusion requirements. These 12 CBOs collectively provided HIV testing services to a total of 10,513 MSM over a period of 6-18 months, with the following results:

- 5521 MSM (52.52% of the total) tested for HIV for the first time
- Of 808 MSM who tested positive at the screening, 718 (89%) were referred to the local CDC
- Of MSM who were confirmed as HIV positive, 95.14% took a CD4 test
- Of those who took a CD4 test, 29.96% had a CD4 count of less than 350
- Of 144 MSM who were eligible for ART, 130 (90.28%) started treatment

Furthermore, CBOs provided qualitative feedback on their experiences to analyze the conditions that would be needed to facilitate scale-up, as well as existing challenges. They highlighted non-discriminatory treatment from peers; in-depth counseling; confidentiality; and follow-up support as important advantages of CBO-based testing.

Conclusions: The case-studies demonstrate that CBO-based rapid-testing has made a significant contribution to the AIDS response among MSM, and possesses the following clear advantages:

- Expanded testing coverage among MSM
- High rates of referral for confirmatory HIV testing and CD4 testing, with low loss-to-follow-up
- High rates of ART uptake among eligible clients, and expanded ART coverage
- Low implementation costs leading to clear economic benefits
- Potential as a tool for strengthening CBO capacity, as well as community and CDC relations

In view of these findings, we recommend that health departments raise funds to support expansion of CBO-based rapid testing via a “pilot site” model, employing standard technical and management practices that can be promoted via CBO capacity-building. We recommend that the government use this program as a platform for purchasing CBO services, so that within 2-3 years, MSM CBOs will have formed a network of service-providers that has been incorporated into the national AIDS response.

Part 1: Background

In recent years, sexual intercourse has become the main transmission route for HIV in China, with prevalence remaining high among men who have sex with men (MSM). According to the “2011 China AIDS Epidemic Estimates” report issued by NCAIDS, there are approximately 780,000 people living with HIV (PLHIV) in China, among whom 346,000 cases have already been confirmed via testing. In other words, 56% of PLHIV in China are still unaware of their HIV status. The report also states that among the 48,000 new infections that occurred in 2011, 29.4% were due to homosexual intercourse. This corresponds to an extremely concerning growth trend.

(1) Development of HIV Rapid Testing in China

(1-1) The 2010 and 2012 State Council “Notices” on the HIV response, as well as the “China Action Plan to Prevent and Control HIV/AIDS During the Twelfth Five Year Plan Period” issued in 2012, state that HIV rapid-testing should be widely implemented as a way of expanding the coverage of HIV prevention and treatment services.

To date, NCAIDS has drafted a technical handbook on rapid-testing, which has been implemented by some local CDCs and CBOs for the purpose of HIV screening. However, the government has yet to formulate a concrete plan for the provision of rapid-testing services by MSM CBOs.

(1-2) International organizations have actively promoted community-based provision of HIV rapid-testing and counseling services.

WHO has supported the development of an “Operational Handbook for the Provision of HIV Rapid Testing and Counseling by MSM Community Groups” by sponsoring collaboration between CDC experts and MSM community groups with experience in rapid-testing. The guidelines are based on community experiences, but also fully reflect relevant technical and managerial requirements.

UNAIDS has supported China MSM Health Forum as it has carried out this evaluation, with a view to promoting the further participation of MSM CBOs in HIV rapid testing.

GAP has supported rapid-testing training and pilot projects.

(1-3) Since 2009/2010, we estimate that around 40 CBOs have initiated HIV rapid-testing programs to meet local demands, with the support of partners including NCAIDS, GAP, Gates Foundation, local CDC etc.

(1-4) At the local level, CDCs have adopted different attitudes towards the provision of HIV rapid-testing services by MSM CBOs. In some places, the provincial CDC is supportive, while the district/city-level CDC is resistant; in other locations, the reverse is true.

(2) HIV Rapid Testing Procedure

HIV rapid testing is a relatively new technology that has nevertheless been used for several years in the national AIDS response following the development of domestic testing kits. HIV rapid testing refers to the completion of an initial HIV screening by means of a saliva-based, or blood-spot-based testing kit that is easy to operate, and yields quick results. Furthermore, according to the manufacturers of testing kits that were used by MSM CBOs in this study, their products have an accuracy rate in excess of 99%, (for example, the accuracy of “Aiwei” HIV antibody saliva-based testing kit produced by Beijing Manuo Biotechnology Company is 99.8%; the accuracy of the “Aikang” HIV blood-spot testing kit produced by Acon Biotech (Hangzhou) is 99.7%). These properties make rapid testing kits suitable for the large-scale expansion of testing programs.

In China, MSM CBOs typically observe the following procedure during rapid-testing provision:

Engagement with the community, and mobilization for HIV testing – agreement with client on time and venue for testing – explanation to client of testing procedure and related management requirements in order to gain informed consent (*this section includes the promise to maintain patient confidentiality*) – pre-test counseling (*this section includes understanding the client’s personal medical history*) – implementation of HIV test – post-test counseling (*this section includes advice on HIV prevention*) – notification of test result – mobilization for confirmatory testing at local CDC for those who test positive – HIV treatment for PLHIV – contingencies for emergency situations.

(3) UNAIDS-CMTHF Project Overview

In 2011, China MSM Health Forum and UNAIDS entered discussions to cooperate on the “China MSM Community Leadership Project”.

China MSM Health Forum suggested that one of the core components of the project should be the promotion of community-based rapid testing since both national policy-makers and the MSM community wish to strengthen the AIDS response among MSM, and rapid-testing dovetails well with the current

government policy of testing and treatment scale-up. Moreover, the Forum pointed out that MSM CBOs across the country have already launched rapid-testing pilots through the support of different programs, and have gained valuable experience in service provision, as well as awareness of the factors that are limiting testing expansion. By collecting, summarizing, discussing and sharing this knowledge both MSM CBOs and the government could adopt strategies that would allow them to enhance coverage. Finally, the MSM Forum proposed itself as a suitable platform for sharing community experiences, reflecting community needs and enhancing dialogue between civil society and the government.

In view of these factors, China MSM Health Forum and UNAIDS agreed to include an evaluation of community-based rapid testing within the overall scheme for the “China MSM Community Health Leadership Project”.

Part 2: CMTHF HIV Rapid Testing Evaluation

(1) Aim of Evaluation

To carry out an evaluation of key areas relating to the effectiveness and impact of MSM CBO-based rapid testing services, so as to provide evidence for government purchase of services from CBOs and to put forward practical suggestions for rapid testing scale-up.

(2) Evaluation Content

(2-1) The Forum and UNAIDS formulated the template for the rapid-testing case-study (see Appendix 1). The template covers the major aspects of rapid-testing provision and related service-delivery data, and requires that CBOs comply with its format, which includes both qualitative and quantitative information e.g. the number of MSM clients who took their first HIV test. In the early stages of the survey, the Forum revised the template several times based on feedback from MSM CBOs.

(2-2) CBOs provided information based on template requirements, as well as additional feedback relating to their personal experiences in service-provision, for example, their relationship with the local CDC.

(3) Participant Selection

(3-1) The Forum wished to collect case-studies from CBOs that had a degree of operational

independence, possessed significant experience in the provision of community-based rapid-testing services, maintained records of their service outputs, and had established some form of cooperation with local CDC. In February 2011, the Forum published the case-study template via LGBT, TONGZHI, China MSM Health Forum and other e-mail groups in order to attract submissions from domestic MSM CBOs.

(3-2) By April 2012, the Forum had received 16 case-studies from 15 cities. The CBOs that contributed case-studies were spread across the whole country, had different backgrounds and different technical support partners, and included CBOs that had been invited by WHO to contribute to its “Operational Handbook for the Provision of HIV Rapid Testing and Counseling by MSM Community Groups”. Among the CBOs that submitted case-studies, 11 were members of the Forum, 5 were not.

(3-3) The CBOs that were included in this evaluation met the study’s quality standards, and were selected in a manner that was open, fair, transparent and rigorous.

(4) Screening of Case-Studies

An expert panel reviewed the case-studies and selected twelve as the basis for the present evaluation; in some cases, they also requested additional information from the CBOs in order to improve the quality of the case-studies. Of the four submissions that were not included in the evaluation, one was an online marketing promotion for HIV rapid-testing kits, and three were rejected because they didn’t provide sufficient quantitative data. Of the twelve accepted case-studies, nine came from Forum members, while three were from groups that do not belong to the Forum.

(5) Analysis of CBOs Included in the Evaluation

See next page for Table 1: Overview of CBO Participants in Evaluation Study

Table 1: Overview of CBO Participants in Evaluation Study

CBO						Rapid-testing Program				Rapid-testing Operational Information			
City	Name	Date established	FT staff	PT staff	Volunteers	Date established	FT staff	PT staff	Volunteers	No. sites	Testing sites	Av. monthly coverage	Technical support partners
Beijing	Chaoyang Chinese AIDS Intervention Working Group	2005.05	13	0	0	2005.05	13	0	0	5	CBO office	800	China CDC; Xiangyun Treatment Management Corporation
Changsha	Changsha Zhongda Sunshine Working Group	2004.03	3	8	30	2010.08	2	3	15	6	CBO office, sauna, health center, MSM meeting spot	500	AIDS Relief Fund for China, Hunan Province CDC
Chongqing	Chongqing Tongxin Working Group	2006.07	5	2	130	2009.07	3	3	0	3	CBO office	250	AIDS Relief Fund for China, AIDS Care China, Jiulongpo and Dadukou CDC, WHO
Guangzhou	Lingnan Fellows Health Support Center	2007.10	4	3	40	2011.08	4	1	30	2	CB office, city-level and district-level CDC Red Ribbon centre	2000 offline	Guangzhou City CDC, Yuexiu District CDC
Harbin	Heilongjiang Kangtong Working Group	2002.03	1	8	20	2011.07	1	8	0	1	CBO office	300	Heilongjiang Province CDC, Harbin City CDC, WHO
Hefei	Anhui JianghuaiTongxin Working Group	2005.08	2	2	24	2011.04	2	1	24		City-level CDC office, sauna	400-500	Hefei City CDC, AIDS Relief Fund for China, Beijing Gender Health Education Institute
Shanghai	Shanghai Qing'ai	2007.04	5	4	42	2010.04	3	0	0	1	CBO office	50-100	Changning District CDC, Hongkou District CDC
Suzhou	Jiangsu Rainbow Volunteer Working Group	2002.02	5	10	50	2010.07	5	0	0	4	CBO office, MSM bar	800	Jiangsu Province CDC, Suzhou City CDC, Jiangsu Province Preventive Medicine Assn.
Taiyuan	Landian Working Group	2006.06	1	3	38	2010.07	1	3	8	2	CBO office, sauna	300	Shanxi Province CDC, Taiyuan City CDC, Taiyuan City 4 th People's Hospital, AIDS Relief Fund for China
Tianjin	Tianjin Deep Blue Working Group	2004.10	6	3	152	2009.10	3	2	10	1	Sauna	1500	China CDC, Tianjin City CDC, Hongqiao District CDC, GAP, WHO
Xi'an	Shanxi Tongkang Working Group	2002.12	7	3	242	2007.08	6	2	45	7	CBO office, hospital testing site, sauna, bar, MSM club	2500	Shaanxi Province CDC, Xi'an CDC, WHO
Zhengzhou	Henan Three Grains Working Group	2007.10	4	5	20	2011.04	4	5	10		CBO office, sauna	300	Henan Province CDC, Zhengzhou City CDC, Jinshui District CDC

Note: The 12 CBOs have been ordered alphabetically by city.

Part 3: Study Findings

(1) Assessment of Data Quality

(1-1) Overall, study participants provided data that met with the template requirements.

(1-2) CBOs in different cities used different methods to estimate the size of the local MSM population, as well as their service coverage. Because these methods lack a scientific basis, they are not entirely reliable. However, this problem is widespread, and not restricted to CBO data.

(1-3) Some CBOs were not able to provide data on follow-up that took place after confirmation of the initial diagnosis. This was either because of a lack of cooperation with the local CDC, or because the CBO does not provide PLHIV care and support.

(1-4) Service output data is generally submitted to local CDC for verification, and is therefore reliable. Other information included in the case-studies relates to the CBO's internal operations e.g. rapid testing procedures, CBO background, and is therefore considered to be reliable.

(2) Service Outputs

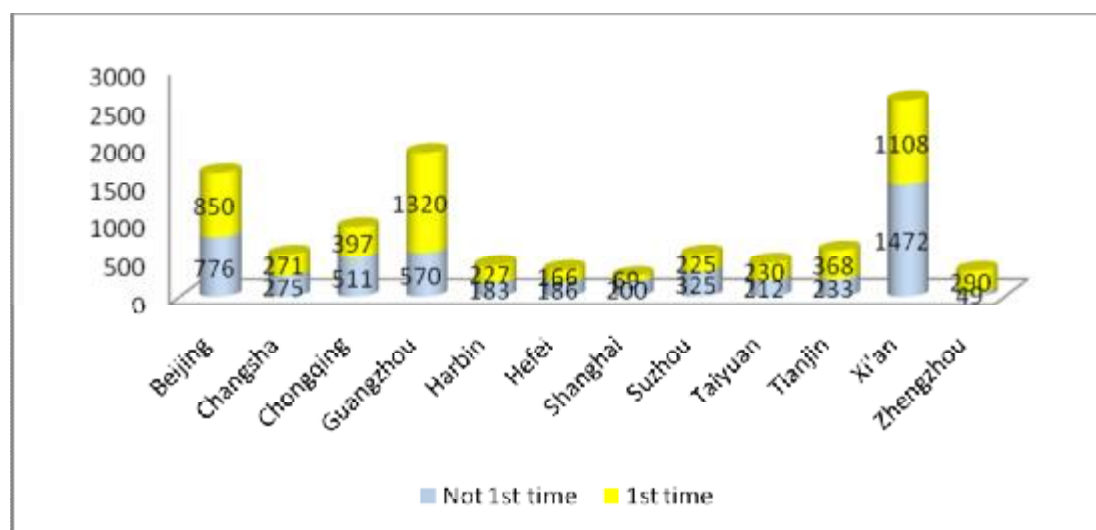
(2-1) The Forum carried out statistical analysis on the case-studies using "EpiData3.1". Subsequent to the initial analysis, the Forum followed up with study participants to verify some of the outlying values, and understand the factors causing the divergence.

(2-2) The main results are as shown in Table 2: Overview of MSM CBO Service Outputs

Table 2: Overview of MSM CBO Service Outputs

City	No. sites	Testing period (months)	No. MSM tested	1 st time for HIV test		HIV positive result		Referral to CDC		Confirmation of HIV+ status		CD4 testing		CD4 count <350		ART treatment		Syphilis	
				No. MSM	% of total tested	No. MSM	% of total tested	No. MSM referred	% of total suspected HIV+ cases	No. MSM confirmed as HIV+	% of total referred to CDC	No. MSM who did CD4 test	% of total confirmed HIV+ cases	No. MSM with CD4<350	% of total confirmed HIV+ cases	No. MSM that started ART	% of MSM that were eligible	No. MSM who tested positive	% of total that tested
Beijing	2	6	1626	850	52.28	81	4.98	81	100	75	92.59	73	97					223	13.7
Changsha	6	12	546	271	49.64	28	5.13	25	89.29	25	100							5	0.92
Chongqing	4	12	908	397	43.72	103	11.34	83	88.58	81	97.59	69	83	12	17.39	10	83.33	22	2.42
Guangzhou	3	5	1890	1320	59.84	166	8.78	148	89.16	148	100	139	93	42	28.39	39	92.86	86	4.55
Harbin	1	6	410	227	55.37	13	3.17	13	100	13	100	13	100	3	23.08	2	66.67		
Hefei	2	10	352	166	47.16	13	3.69	13	100	13	100	13	100					34	9.66
Shanghai	1	8	269	69	25.65	12	4.46	11	91.67	11	100	11	100	5	45.45	5	100	1	0.37
Suzhou	4	12	550	225	40.91	50	9.09	45	90	45	100	40	88.88	25	62.50	20	80		
Taiyuan	2	18	442	230	52.04	61	13.80	55	90.16	55	100	55	100					60	13.5
Tianjin	1	6	601	368	61.23	105	17.47	80	76.19	71	88.75	71	100	33	46.48	30	90.91		
Xi'an	14	12	2580	1108	42.95	127	4.92	116	91.34	99	85.34	99	100	12	12.12	12	100	89	3.45
Zhengzhou	2	12	339	290	85.55	49	14.45	48	97.96	47	97.92	43	89.50	12	27.91	12	100	46	13.5

(2-3) MSM Receiving First HIV Test



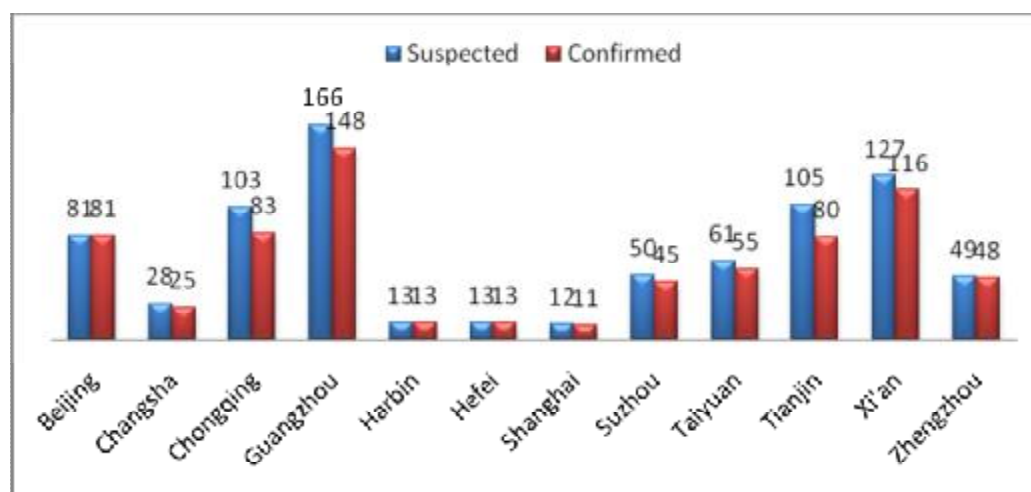
12 CBOs mobilized a total of 10,513 MSM to get tested for HIV during a period which varied between 6-18 months for different CBOs. Among those mobilized for testing, 5521 (52.52%) reported that they were getting tested for the first time.

For 6 CBOs, more than 50% of the MSM clients reported that it was their first HIV test. The highest recorded rate was 85.55% (Zhengzhou), while the lowest was 25.65% (Shanghai).

The 12 CBOs found 808 suspected cases of HIV, corresponding to an overall prevalence of 7.69%. The single highest prevalence rate was 17.47% (Tianjin), while the lowest was 3.17% (Harbin). 7 CBOs reported prevalence rates of greater than 5%, while 4 groups reported HIV prevalence of greater than 10%.

The prevalence rates included in this report often differ from the overall MSM prevalence rates reported for each city. This is because each CBO is selective with respect to testing venue (e.g. sauna, office, hospital, CDC) and MSM sub-group (e.g. university students, money boys, sauna customers).

(2-4) Referral to CDC for Confirmation of HIV Diagnosis



12 CBOs successfully referred 718 MSM to local CDC for confirmatory testing, hence the average referral rate was 89%. Thanks to the help and encouragement of outreach workers, 4 CBOs were able to achieve referral rates of 100%, meanwhile 11 CBOs achieved referral rates of 88.5% or above. The single lowest referral rate was 76.19% (Tianjin).

(2-5) CD4 Testing

Some MSM diagnosed with HIV also willingly received HIV-related care and support services provided by the CBO. 11 CBOs provided relevant data: in total, 626 PLHIV consented to CD4 testing; of which, 3 groups achieved CD4 testing rates of 80-90%, 2 groups achieved rates of 90-100%, and 6 groups achieved rates of 100%.

(2-6) PLHIV with CD4<350

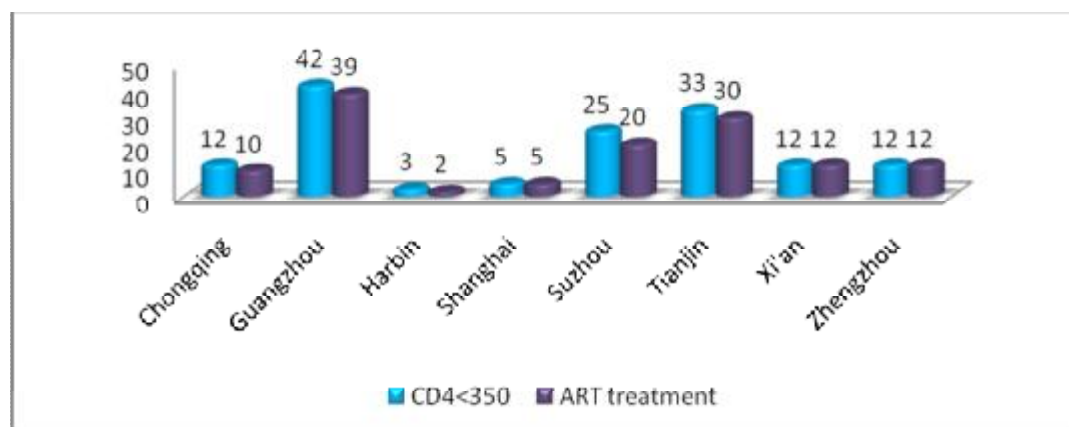
8 CBOs provided data on the initial CD4 counts of MSM who were confirmed as HIV+. Overall, 27.93% of the confirmed HIV cases had CD4 counts of less than 350. The highest rate was 62.5% (Suzhou) and the lowest rate was 12.12% (Xi'an). 5 groups reported rates of less than 30%.

The initial CD4 counts of PLHIV that were located via CBO-based rapid-testing programs are high compared with the national average, which mainly consists of PLHIV who present for testing at the CDC or hospital once they begin to feel sick, or during treatment for other conditions – as NCAIDS described in the May 2011 edition of the Lancet, around 30% of HIV diagnoses currently take place when the patient has a CD4 count of less than 50.

This result demonstrates the exceptional advantage of community-based testing services in

expanding coverage, and reducing AIDS-related mortality.

(2-7) Acceptance of ART



8 CBOs provided data on CD4 counts: among the confirmed HIV cases, 144 were eligible for treatment under existing guidelines. Of these, 130 started ART, hence the overall treatment rate was 90.28%. 3 CBOs achieved a treatment rate of 100%, and 7 groups recorded rates of greater than 80%. The lowest rate was 66.67% (Harbin).

(2-8) Syphilis Testing

9 CBOs provided both HIV and syphilis testing to MSM clients, reaching a total of 8952 individuals. Of those tested, 556 screened positive for syphilis, corresponding to an overall prevalence of 6.32%. The highest recorded prevalence was 13.71% (Beijing), while the lowest was 0.37% (Shanghai). 3 CBOs reported syphilis prevalence in excess of 13.5%, 3 groups reported prevalence of 1-5%, and 2 groups reported prevalence of less than 1%.

(2-9) Analysis of Outlying Data

According to study participants, outlying data values can be attributed to the following factors:

- Prior to April 2011 Zhengzhou did not have a CBO-based rapid testing program; instead MSM were being mobilized to get tested at the local CDC via the internet. With the introduction of a CBO-based service, testing coverage expanded, such that 85.55% of MSM clients were getting tested for the first time.
- Shanghai has a low HIV prevalence due to the location of the testing site, its operating hours

and the characteristics of its target MSM population.

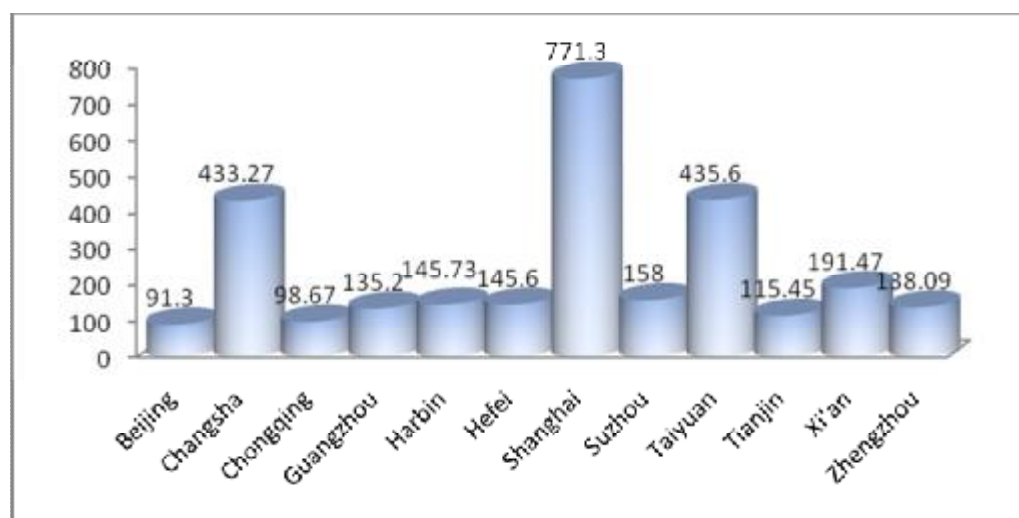
- Shanghai and Changsha both reported low syphilis prevalence, however, this is due to problems with the quality of the testing kits. Both cities later stopped their syphilis rapid-testing programs. Many other cities have also discovered a similar issue, and have stopped using syphilis rapid-testing kits, instead relying on traditional testing techniques.
- Tianjin recorded HIV prevalence of 17.47% because its data refers to a recently opened sauna-based HIV testing program, and many of the clients were taking the HIV test for the first time.
- Tianjin could only refer 76.19% of its suspected HIV cases to the local CDC for confirmation because its program was based in an MSM sauna, and many of the clients were temporary visitors to Tianjin.
- Shanghai reported a high unit cost (see below) because the number of MSM clients using its service was relatively low.

(3) CBO Estimates of the Annual Unit Cost for HIV Rapid Testing

Table 3: CBO Estimates of Annual Unit Costs for HIV Rapid Testing

City	CBO Name	Estimated no. of MSM tested per year	Estimated annual budget/10,000 RMB	Estimated annual cost per MSM/RMB
Beijing	Chaoyang Chinese AIDS Intervention Working Group	5000	45.65	91.3
Changsha	Changsha Zhongda Sunshine Working Group	600	25.996	433.27
Chongqing	Chongqing Tongxin Working Group	1800	17.76	98.67
Guangzhou	Lingnan Fellows Health Support Center	4000	54.08	135.2
Harbin	Heilongjiang Kangtong Working Group	1500	21.86	145.73
Hefei	Anhui JianghuaiTongxin Working Group	500	7.28	145.6
Shanghai	Shanghai Qing'ai	200	15.426	771.3
Suzhou	Jiangsu Rainbow Volunteer Working Group	1000	15.8	158
Taiyuan	Landian Working Group	500	21.78	435.6
Tianjin	Tianjin Deep Blue Working Group	4000	46.18	115.45
Xi'an	Shaanxi Tongkang Working Group	3000	57.44	191.47
Zhengzhou	Henan Three Grains Working Group	2500	34.522	138.09

(3-1) Estimated unit testing costs, based on information provided by each CBO



Based on the data provided by the 12 CBOs, the mean cost per person tested is 238.31 RMB. The single lowest estimate was 91.3 RMB/person (Beijing), and the highest was 771.3 RMB/person (Shanghai). 2 CBOs reported unit costs of less than 100 RMB/person, 5 CBOs reported unit costs of 100-150 RMB/person, 2 CBOs reported unit costs of between 150-200 RMB/person, and 3 CBOs reported costs in excess of 200 RMB/person.

(3-2) Systematic and expert investigation would be needed to produce overall costing estimates for HIV rapid-testing. The figures provided here bear the influence of individual program design, and are therefore only provided as a reference.

(3-3) Nevertheless, the estimates suggest that CBOs in different regions, with different programs that serve different MSM sub-groups can provide rapid testing services at a lower unit cost than CDC, hospitals etc.

(3-4) Moreover, the strength of the CBO's links with the local MSM community influences the reach of its testing mobilization efforts, and this in turn influences the unit intervention cost. Unit testing cost is also affected by local economic factors.

(3-5) The estimates also suggest that unit costs are influenced by the CBO's depth of experience in service provision, management and program implementation. In general, CBOs that are more mature have lower unit intervention costs.

(3-6) However, depending on the nature of the target community (e.g. online, entertainment-venue based) and the sub-population (e.g. money-boys, transgender), it may be necessary to adopt different marketing strategies, hence there is some variation between the unit costs that are quoted.

(4) Resources Required For CBO Rapid Testing

Based on budgetary estimates, the main expenses comprise rent, salaries, communication, transport, office equipment, publicity materials, testing kits and administrative expenses. The basic conditions needed to operate a rapid-testing site are described in more detail in Appendix 2.

Furthermore, the CBOs reported that factors such as non-discriminatory peer-based services; in-depth counseling; confidentiality guarantees; convenient access; and seamless follow-up, including referral for PLHIV care and support, all play an important role in maintaining quality and gaining the approval of the community.

Part 4: Rapid-Testing Impact and Factors Affecting Scale-Up

(1) Contribution to the AIDS Response Among MSM

The case-studies demonstrate that for 12 CBOs providing rapid-testing services over a period of 6-18 months, the HIV prevalence among the target population was 52.52%, and that 89% of suspected HIV positive cases were successfully referred to local CDC for confirmatory testing. Furthermore, some of those diagnosed with HIV were sufficiently impressed with the competence and high-quality of the CBO's services to accept follow-up support. Hence, improvements in CBO-based rapid-testing and referral have contributed to a long-term improvement in the quality of PLHIV care.

According to the case-studies, 95.14% of confirmed HIV cases subsequently underwent a CD4 test. Moreover, thanks to encouragement from CBO staff members, 90.28% of those whose CD4 count was less than 350 commenced ART. Furthermore, although each CBO reported different figures for local HIV prevalence, overall, the CBOs had considerable success in the early detection of HIV: on average, only 27.96% of confirmed HIV cases had CD4 counts of less than 350.

Despite the fact that these figures come from relatively mature CBOs, they nevertheless suggest that specialized, peer-based services are not only effective as a one-off HIV intervention, but also result in MSM clients regularly getting themselves tested. In other words, CBO rapid-testing has considerable potential to contribute to the expansion of "early testing, early discovery, early treatment"; and hence to reductions in new infections and AIDS-related mortality.

(2) Advantages of CBO-Based Rapid-Testing Service Provision

It needs to be stressed that the data in this study comes from relatively mature CBOs, and does not necessarily represent the overall capacity of MSM CBOs in China. Nevertheless, by facilitating the development of suitable CBOs through capacity building it would be possible to reach the maturity shown by the CBOs included in this study, thus making a major contribution to the AIDS response among MSM. Based on our analysis, we believe effective CBO-based testing programs have the following advantages:

(2-1) Expanded Reach Among MARPs

MSM CBOs can deepen their engagement with local MSM community leaders and sub-populations (e.g. venue managers, transgender, sex-workers) via HIV rapid testing and referral services; moreover, rapid testing programs provide useful information on the strength of this relationship.

(2-2) Peer-Effect Strengthens Communities

Experience from the community suggests that MSM CBOs are able to take advantage of a unique “peer” effect when implementing rapid-testing, and that this constitutes one of the main strengths of CBO-based testing programs. Effective staff members are capable of providing a service that wins the trust of the community – this is critical in ensuring quality, as well as client acceptance of testing and treatment.

(2-3) Service Provision Strengthens CBO Capacity

(1) CBOs that provide rapid-testing services have trained and consolidated stable teams of HIV counselors, and drafted internal policies on confidentiality, informed consent, non-discrimination etc. that counselors must adhere to during their work.

(2) CBOs have established operational procedures for each step in the service, e.g. counseling, testing, referral to CDC, data-sharing, documentation. Moreover, they have assigned specialized staff and created procedures for managing the linkage between these different steps.

(3) CBOs possess rapid-testing support staff who are responsible for handling test-kit storage and usage, file-keeping, waste disposal, emergencies etc. These staff members also have their own relevant operational procedures.

(4) Some CBOs have initiated PLHIV services that cover CD4 testing, treatment etc., and have

established relevant working procedures. Some CBOs have also helped to issue ART to PLHIV, with the support of local healthcare facilities.

(2-4) Service Provision Strengthens CBO-CDC Relations

HIV rapid-testing has resulted in substantive improvements in cooperation between MSM CBOs and local CDC in areas such as information-sharing, referral, and especially in technical support (e.g. waste disposal).

At the same time, the regular dialogue between CBO and local CDC has led to mutual oversight, and the reduction of conflict of interest in areas such as program management, funding etc. For example, Chengdu Tongle has employed CDC-approved technical staff to simultaneously implement rapid-testing and blood-taking, so that the blood samples can be instantly sent to the CDC for confirmation of HIV status. Tianjin City Hongqiao District CDC has also seconded staff to Deep Blue Working Group so that they can cooperate in a similar manner.

(2-5) CBO-Based Testing Makes Economic Sense

The case-studies demonstrate that it is cheaper for CBOs to provide rapid-testing than for specialized health facilities; furthermore, as CBOs gain in maturity their unit intervention costs tend to come down.

(2-6) Basic Conditions Needed for CBO-Based HIV Rapid Testing

(1) From the case-studies and the drafting process for the WHO/NCAIDS “Operational Handbook for the Provision of HIV Rapid Testing and Counseling by MSM Community Groups”, we can see that some CBO providers of HIV rapid-testing services have already defined technical, managerial and service standards, with relevant measurable indicators. Hence there is already a basic model and relevant experience that would facilitate the expansion of rapid testing.

(2) Mature MSM CBOs already have a basis for sustainable delivery of rapid-testing services. However, long-term access to resources and technical support is critical for the future – not only in determining whether or not these CBOs are able to improve the quality of their service, but also in determining whether or not it is possible to develop a scalable model.

(3) The case-studies indicate that geographical factors do not have a significant effect on service

delivery. However, the characteristics of the target sub-population (e.g. permanent residents or migrants such as sauna customers or money-boys), and the mobilization strategy adopted (e.g. venue-based or online) both have a significant effect.

(4) At present, the MSM Forum is aware of around 30 different MSM CBOs that are already providing rapid-testing services, in addition to the 12 that were included in this study. There is also an even larger number of MSM CBOs that would like to receive the training and capacity-building that would allow them to reach relevant technical and management standards.

(3) Challenges Facing CBO Service-Providers

(3-1) Funding

The government has yet to formulate an overall strategy for the implementation of CBO-based testing services by MSM CBOs. Instead, MSM CBOs are independently carrying out this work with the support of a variety of partners. A lack of stable, long-term funding will inevitably have a negative impact on the quality and systematization of CBO-based rapid testing work.

(3-2) Mechanisms

(1) CBOs still need to standardize mechanisms relating to human resources, technological and management requirements, cooperation and performance evaluation.

(2) As yet, CBO-based rapid testing lacks a capacity-building plan and training mechanisms that would reflect CBO experiences and be capable of satisfying community needs. As a result, some CBOs are carrying out rapid testing with insufficient technical competencies and operational guidelines. When rapid testing is implemented under such conditions it not only will not gain the trust of MSM clients, it will also harm the prospects of future service expansion.

(3-3) Policies

(1) As yet, the government has not sponsored a concrete plan for the expansion of CBO-based rapid testing for MSM.

(2) Occupational exposure is a risk for CBO testing staff, however there is currently no safety mechanism in place.

(3) CDCs have different attitudes towards CBO-based rapid testing. In some locations, the CDC is

anxious in case the CBO makes a technical mistake or breaches the confidentiality of the person being tested; while in other locations, the CDC regards HIV testing as its own prerogative, and therefore disdains any kind of cooperation with CBOs.

(4) While some funding agencies have provided technical support and evaluation to CBOs, others have not. Similarly, some CBOs have not established cooperation with their local CDC, such that each carries out its own programs with their own management and evaluation procedures. Finally, in some places, health departments and other agencies linked with the government (e.g. GONGOs) have joined hands to monopolize the “CBO” situation. This kind of attitude impacts the ability of CBOs to effectively provide a quality HIV rapid-testing service, and is harmful to CBO capacity-building.

Part 5: Recommendations Concerning Rapid Testing Scale-Up

(1) Policy

(1-1) Ensure participation of MSM CBOs in the AIDS response through policy and legal guarantees

We recommend that, in this “post-Global Fund stage” of the national response to HIV among MSM, the government deepen its commitment to the policy of community involvement. Furthermore, the government should work to eliminate discrimination, and ensure a policy and legal environment that fosters the participation of MSM CBOs as outlined in the 2011 State Council Notice, Li Keqiang’s speech to Beijing CDC and Wen Jiabao’s speech to China CDC on World AIDS Day.

(1-2) Establish platforms for dialogue and cooperation

We recommend that the Ministry of Health establish cooperation mechanisms within the framework of its national AIDS response such that the government can regularly interact with the MSM community, hear its opinions, exchange information and work together on solving specific issues.

(1-3) Formulate a scale-up strategy

We recommend that the Ministry of Health urgently establish supportive policies and a concrete plan for the expansion of community-based HIV rapid testing services; moreover, it should clarify the responsibility of each level of the CDC system within this plan.

(1-4) Establish a workable model for government service purchase

We recommend that the Ministry of Health summarize HIV rapid-testing experiences from MSM CBOs e.g. “peer” service model for HIV counseling/education/psychological support; cooperation

between CBO and local CDC on matters including confirmation of HIV diagnosis, PLHIV care and support, and technical oversight; the role of CBO service quality in terms of mobilizing community members for testing. Once these experiences have been summarized, the Ministry of Health should establish a scalable model, and incorporate it into its national AIDS response so as to consolidate existing community strengths. The scale-up could be carried out via government purchase of CBO services.

(1-5) Implement funding to support expansion

We recommend that the government provide targeted financial support for the promotion of CBO-based rapid testing, and that the funding allocation should ensure that CBOs with a strong community base can upgrade their HIV testing facilities, human resources and management.

(1-6) Improve monitoring and evaluation mechanisms

We recommend that the government enhance cooperation and supervision mechanisms for the participation of CBOs in the planning, funding allocation and M&E of national and local HIV responses, thereby ensuring effective oversight and avoiding the loss, misuse and misappropriation of government funds.

(2) Strategy

(2-1) Government funding

We recommend that government health departments take responsibility for all aspects relating to fundraising, and that the government cooperate with the China Male Tongzhi Health Forum in establishing an MSM CBO Rapid-Testing Coordination Group that will be responsible for devising the scale-up plan. We recommend that this plan adopt a project-based model to achieve scale-up.

(2-2) Capacity-building plan

- Standardized training of “teaching sites”: 8-10 CBOs with sufficient technical capacity to be chosen as “teaching sites”. These CBOs summarize their experiences with a view to defining a workable model for maintaining and evaluating quality peer-based testing services. The CBOs should also receive training on technical and management guidelines to bring their work in line with government requirements, as well as the needs of the community.
- Incubation of next generation of CBO service-providers: 10-20 CBOs to be chosen that

have either never carried out rapid testing, or have relatively immature programs. These CBOs represent the first batch of new trainees. Staff members from these CBOs should receive centralized rapid testing training and certification.

- On-site training: the “teaching sites” to be used as on-site training centers so that the next generation of service providers can gain first-hand knowledge and experience.

(2-3) Scale-up

- Define implementation plans: the incubation and scale-up period should last for one year, during which time the new service-providers should formulate an implementation plan for rapid-testing, and complete their first program cycle.
- Establish mechanism for technical support: newly trained CBOs should establish a one-to-one training relationship with the teaching sites, so that they can access technical support and improve their service provision capacity.

(2-4) Network formation

In order to address the issue of MSM mobility, the CBO-based rapid testing program should be gradually expanded so that it forms a network covering the whole country. CBOs that provide testing services to highly mobile MSM should exchange resources and knowledge, so as to expand their coverage of this population.

(2-5) Monitoring and Evaluation

- The Coordination Group to provide ongoing technical support and monitoring and evaluation of the rapid-testing program. It should also oversee and improve the working mechanisms of the teaching sites, as well as the training framework.
- We recommend that the government carry out an annual survey of the results from the CBO-based HIV rapid-testing scale-up, and produce an evaluation report.

We hope that within 2-3 years, even more CBOs will be providing effective, standardized testing services, and that their work will have been brought into the national AIDS response, thereby constituting a network of community-based rapid-testing.

【Appendix 1】

【Appendix 2】

China MSM Health Forum

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