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HOME-BASED COUNSELING AND TESTING: PROGRAM COMPONENTS AND APPROACHES

REPORT ON A TECHNICAL CONSULTATION
CONVENED IN NAIROBI, KENYA
NOVEMBER 3–5, 2009

[JUNE 2010]

This publication was produced by the AIDS Support and Technical Assistance Resources Project, Sector 1, Task Order 1 (AIDSTAR-One), USAID Contract # GHH-I-00-07-00059-00, funded January 31, 2008.

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The AIDS Support and Technical Assistance Resources (AIDSTAR-One) project is funded by the U.S. Agency for International Development under contract no. GHH-I-00-07-00059-00, funded January 31, 2008. AIDSTAR-One is implemented by John Snow, Inc., in collaboration with Broad Reach Healthcare, Encompass, LLC, International Center for Research on Women, MAP International, Mothers 2 Mothers, Social and Scientific Systems, Inc., University of Alabama at Birmingham, the White Ribbon Alliance for Safe Motherhood, and World Education. The project provides technical assistance services to the Office of HIV/AIDS and USG country teams in PEPFAR non-focus countries in knowledge management, technical leadership, program sustainability, strategic planning and program implementation support.

Recommended Citation

Escobar, Maria Claudia 2010. *Home-Based Counseling and Testing: Program Components and Approaches. Technical Consultation Report*. Arlington, VA. USAID/AIDSTAR-One Project, Task Order I.

Abstract

Home-based HIV counseling and testing (HBCT) holds promise for increasing the uptake of HIV counseling and testing (HCT) in particular settings. HBCT is one counseling and testing model that has been shown to overcome some of the known barriers of HCT, has high acceptability and uptake among clients, and ensures the likelihood of receiving HIV test results. The expansion and scale-up of CT services has raised concerns over the quality and standardization of HBCT. Furthermore, at present there exist no international guidelines on HBCT to assist countries implementing this as a strategy. AIDSTAR-One, in collaboration with the President's Emergency Plan for AIDS Relief (PEPFAR) Technical Working Group on Counseling and Testing, the U.S. Agency for International Development (USAID), and the U.S. Centers for Disease Control and Prevention (CDC), convened a technical consultation on HBCT from November 3 to 5, 2009, in Nairobi, Kenya. The meeting's 40 participants were primarily PEPFAR HBCT program implementers in Kenya and Uganda. The report summarizes implementers' experiences and expertise, identifying key features of their HBCT programs, the challenges and strategic approaches, the lessons learned, and suggestions for new and ongoing HBCT programs.

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ACRONYMS

AMPATH	Academic Model Providing Access to Healthcare
APHIA	AIDS, Population, and Health Integrated Assistance
CDC	U.S. Centers for Disease Control and Prevention
CT	counseling and testing
DBS	dried blood spot
FP	family planning
HBCT	home-based counseling and testing
HCT	HIV counseling and testing
ICOB	Integrated Community Based Initiatives
KEMRI	The Kenya Medical Research Institute
IEC	information, education, and communication
IMC	International Medical Corps
IRDO	Impact Research and Development Organization
MOH	Ministry of Health
NACC	National AIDS Control Council
NASCOP	National AIDS and STD Control Program
PEP	post-exposure prophylaxis
PEPFAR	President’s Emergency Plan for AIDS Relief
PLWH	people living with HIV
PMTCT	prevention of mother-to-child transmission of HIV
QA	quality assurance
SCOT	Strengthening HIV Counselor Training
SOP	standard operating procedure
STI	sexually transmitted infection
TASO	The AIDS Support Organisation
TB	tuberculosis
USAID	U.S. Agency for International Development
VCT	voluntary counseling and testing

ACKNOWLEDGMENTS

We thank everyone who attended the technical consultation on home-based counseling and testing for contributing the suggestions and comments reported here. In addition, we thank the following for their contribution to the meeting's technical design:

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EXECUTIVE SUMMARY

Home-based counseling and testing (HBCT) holds promise for increasing the uptake of HIV counseling and testing (HCT) in particular settings. A significant number of individuals living with HIV, especially in resource-poor settings, do not know their status and report many barriers that prevent them from accessing facility-based HCT. HBCT is one counseling and testing model that has been shown to overcome some of the known barriers of HCT, have high acceptability and uptake among clients, and ensure the likelihood of receiving HIV test results. Particularly in settings with a generalized epidemic and high HIV prevalence, HBCT can be a cost-effective model for reaching untested individuals.

As community- and home-based health delivery services grow, so has interest in expanding HBCT, raising concerns over the quality and standardization of HBCT and its harmonization with other health programs. Furthermore, as some countries—particularly those with generalized epidemics—seek to implement this model, there currently exist no international guidelines on HBCT. While HBCT can be an effective component of a national HIV strategy, countries need guidance to understand criteria for when best to implement HBCT.

AIDSTAR-One, in collaboration with the President’s Emergency Plan for AIDS Relief (PEPFAR) Technical Working Group on Counseling and Testing, the U.S. Agency for International Development (USAID), and the U.S. Centers for Disease Control and Prevention (CDC), organized and convened a technical consultation on HBCT from November 3 to 5, 2009, in Nairobi, Kenya. The meeting’s 40 participants were primarily PEPFAR HBCT program implementers in Kenya and Uganda, as well as a few representatives from national AIDS control programs. The consultation gathered participants’ experiences and expertise, identifying key features of their HBCT programs, the challenges and strategic approaches, the lessons learned, and recommendations for new and ongoing HBCT programs.

CHALLENGES TO IMPLEMENTING HOME-BASED COUNSELING AND TESTING

HBCT program implementers discussed significant implementation challenges, including human resources, commodities, laboratories, and attitudes encountered at the household level. Despite the challenges, participants experienced in HBCT offered many suggestions to facilitate the model’s implementation, including integrating HBCT with other activities to increase cost-effectiveness; combining screening or testing for tuberculosis and/or malaria to help reduce stigma; adopting a variety of HCT approaches (e.g., targeting index client households), or implementing a door-to-door approach to increase coverage; integrating other health care services to boost outreach; and engaging community structures at the onset of activities.

HOME-BASED COUNSELING AND TESTING PROGRAM COMPONENTS AND KEY RECOMMENDATIONS

Kenyan and Uganda HBCT implementers described the key operational perspectives of HBCT, stressing key features, challenges, solutions, and lessons learned. HBCT program components were grouped into two categories: *preimplementation* (including planning, policy development, and training) and *implementation* (including staffing, counseling, community mobilization, integration, follow-up and referrals, lab quality, and monitoring). Recommendations made for each component in HBCT programming appear in detail in the report.

HOME-BASED COUNSELING AND TESTING TOOLS

Participants identified tools necessary for implementing an HBCT program for the following program areas: preimplementation, counseling and testing, referrals and linkages, reporting, and quality assurance.

HOME-BASED COUNSELING AND TESTING RECOMMENDATIONS AND THE WAY FORWARD

At the conclusion of the meeting, participants reached a consensus on its outcomes and recommended developing:

- A technical brief on HBCT
- HBCT case studies
- Generic HBCT guidelines
- A technical working group on HBCT, drawing on participants from this technical consultation
- A database highlighting implementers' and organizations' core competencies
- Plans to harmonize HBCT tools.

Other recommendations included conducting an annual HBCT implementers' forum and south-to-south technical assistance exchanges.

Participants also recommended that AIDSTAR-One, in conjunction with the technical consultation planners, take the lead in determining how these outcomes would be achieved.

CONCLUSION

The move toward universal access to HTC will require a mix of intervention models that recognize a country's specific HIV epidemic in order to reach affected and at-risk target groups and address their needs. While implementation requires ample planning and may be challenging, the experiences

reported by the participants from Kenya and Uganda suggest that HBCT can help identify hard-to-reach individuals living with HIV, as well as serodiscordant couples.

While further evidence is needed, initial findings suggest that—depending on a country’s epidemic—in certain settings, HBCT can be cost-effective, and that it improves access to such groups as men, couples, children, and people in remote areas more effectively than other forms of HCT.

This consultation describes the experiences, challenges, and recommendations of HBCT programming. This report, along with progress on HBCT outcomes, will be posted at www.AIDSTAR-One.com.

INTRODUCTION

Home-based counseling and testing (HBCT) holds promise for increasing the access to and acceptability of HIV counseling and testing (HCT) in particular settings. A significant number of individuals living with HIV, especially in resource-constrained settings, do not know their status and report many barriers that prevent them from accessing facility-based HCT, including transportation, logistics, cost, the need to return to a health facility for test results, fear, stigma, and discrimination. HBCT is one counseling and testing (CT) model that has been shown to overcome some of the known barriers, and to increase acceptance of HCT and the likelihood of receiving an HIV test results. HBCT can be a cost-effective model for reaching untested individuals, particularly in settings with a generalized epidemic and high HIV prevalence.

HBCT can potentially target hard-to-reach populations, such as men who generally do not access health services and others who are unable for a variety of reasons (time, finances, age, and so on) to get to health facilities. HBCT is an effective model in communities that are highly stigmatized, have high HIV prevalence and incidence, or where late diagnosis is common and access to health facilities is minimal or difficult.

HBCT provides HCT within a home environment, thereby increasing community access to HCT and other HIV services. Currently there are two HBCT approaches:

- Door to door testing. HBCT-trained counselors go door-to-door and ask whether household members will agree to HCT in the home. Outreach generally focuses on hard-to-reach communities or areas underserved by health services. The approach can be used to target mobile populations and those communities where HIV prevalence is high.
- Index patients. Counselors visit households with a known HIV-infected member and offer HCT to household members. This approach is effective for identifying serodiscordant couples, children whose parents are living with HIV, and parents whose children are living with HIV.

By reaching households, HBCT has the potential to:

- Improve early diagnosis
- Increase access to antiretroviral therapy
- Empower household members and communities to respond to the psychosocial needs of those who are infected and/or affected
- Deliver couples' HCT and improve disclosure rates, which can lead to improved HIV prevention and treatment adherence
- Prevent HIV transmission, particularly for serodiscordant couples
- Reach girls and women who are not accessing reproductive health services

- Reach HIV-exposed persons who need care and treatment or should be tested for tuberculosis (TB) and other diseases.

As community- and home-based services grow, so has interest in expanding HBCT, raising concerns over the quality and standardization of this service and its harmonization with other health programs. Furthermore, as some countries—particularly those with generalized epidemics—seek to implement this model to increase access to HCT, care, and treatment, there exist no international guidelines on HBCT. While HBCT can be an effective component of a national HIV strategy, increased elaboration on strategies and guidance will provide criteria and factors relevant for deciding when and how best to implement HBCT.

DESCRIPTION OF CONSULTATION

AIDSTAR-One, in collaboration with the President's Emergency Plan for AIDS Relief (PEPFAR) Technical Working Group on Counseling and Testing, the U.S. Agency for International Development (USAID), and the U.S. Centers for Disease Control and Prevention (CDC), organized and convened a technical consultation on HBCT on November 3 to 5, 2009, in Nairobi, Kenya. The meeting's 40 participants were primarily PEPFAR program implementers of HBCT programs in Kenya and Uganda as well as a few representatives from national AIDS control programs. The consultation gathered participants' experiences and expertise, identifying key features of their HBCT programs, the challenges and strategic approaches, the lessons learned, and recommendations for new and ongoing HBCT programs.

Presentations from the consultation can be found on the AIDSTAR-One website: www.AIDSTAR-one.com. The meeting agenda is in Appendix A and the participant list in Appendix B.

HOME-BASED COUNSELING AND TESTING FROM A NATIONAL PERSPECTIVE

Many people in countries with high prevalence rates and generalized epidemics, such as Kenya and Uganda, are unaware of their HIV status, and testing rates remain low. Representatives from the Kenyan and Ugandan Ministries of Health launched the meeting's technical discussion by briefly describing, from a national perspective, those countries' experiences with HBCT. HIV prevention care and treatment services are now including HBCT as an important strategy for increasing access. Data from Kenya suggested a high willingness to test at home (85 percent of those approached agreed to be tested). Coverage of HCT in Uganda increased threefold from 2004 to 2008, particularly among discordant couples. The box below summarizes several HBCT program components from each country and is not meant to be exhaustive list.

Key Components from Kenya:

- Using a range of interventions for counseling and testing, such as provider-initiated testing and counseling; HBCT; and client-initiated CT
- Implementation of HBCT in high-prevalence, high-density areas in both urban and rural settings
- District mapping to facilitate targeting and coverage
- Use of the index patient to increase CT services
- Emphasis on couples testing.

Key Components from Uganda:

- Door to door testing of everyone in the household in selected high-prevalence and difficult-to-reach areas
- Offering testing to 100 percent of partners of HIV-positive clients
- Covering 100 percent children under five who have HIV-positive mothers
- Training of lay counselors in HBCT
- Standardization of HBCT training and tools countrywide.

CHALLENGES TO IMPLEMENTING HOME-BASED COUNSELING AND TESTING PROGRAMS

HBCT program implementers raised significant and numerous implementation challenges covering a variety of areas including human resources, commodities, and attitudes encountered at the household level. A list of challenges is provided below. Despite the challenges, HBCT-experienced participants offered many suggestions to facilitate the model's implementation, including integrating HBCT with other activities to increase cost-effectiveness; combining screening or testing for TB and/or malaria to help reduce stigma; adopting a variety of HCT approaches (e.g., targeting index client households); implementing a door-to-door approach to increase coverage; integrating other health care services to boost outreach; and engaging community structures at the onset of activities. Challenges faced in implementing n HBCT program are grouped below.

Structural challenges:

- Lack of clear government policy on HBCT
- Ineffective or non-existent referral systems
- Ineffective or non-existent monitoring and evaluation systems and quality assurance systems
- Increased identification of people living with HIV (PLWH) overburdening constrained health systems and/or psychosocial support services
- High cost of follow-up
- Constrained financial resources
- Lack of integration of services for the prevention of mother-to-child transmission of HIV (PMTCT)
- Difficult terrain and long distances to cover, often without vehicles
- Geographic target area sometimes too large for the number of staff/volunteers
- Providing adequate confidentiality and privacy for patients.

Human resources challenges:

- Limited human resources
- Staff attrition due to higher wages paid by other organizations
- Personal safety of staff/volunteers.

Challenges at the household level:

- Refusal/lack of interest in testing
- Eligible people often away from home
- Testing children amid delayed results, difficult ethical issues, and lack of referral services
- Parents refuse to be tested, instead authorize testing of children as a proxy for their own status
- Gender issues: when men test negative, they bring their wives for comprehensive care, whereas if both test positive, they each seek care in different health facilities
- Couples prefer to test individually, limiting prevention efforts
- Men might want wives to be tested first and then might decide to be tested based on test results
- Difficulty of retesting HIV-negative people, especially among serodiscordant couples
- Refusal of confirmatory test
- Fear of disclosing one's HIV status
- Asymptomatic PLWH declining cotrimoxazole prophylaxis
- Large households that require more time and counseling
- Cultural, gender, religious, and socioeconomic issues, including PLWH who want to have children.

Laboratory challenges:

- Difficult working conditions (inadequate lighting and limited water supplies)
- Poor infection prevention practices
- Poor waste management practices
- Lack of sufficient referral labs
- Delayed turnaround time of laboratory results
- Time requirements for polymerase chain reaction testing of infants under the age of 18 months.

Commodities challenges:

- Stockouts of testing materials and reagents
- Commodity security
- Supply chain management challenges, especially where supplies must be widely distributed.

HOME-BASED COUNSELING AND TESTING PROGRAM COMPONENTS AND KEY APPROACHES

Representatives from 11 HBCT programs in Kenya and Uganda described the key operational perspectives of HBCT, stressing key features, challenges, solutions, and lessons learned. HBCT program components were grouped into two categories: *preimplementation* (to include planning, policy development, and training) and *implementation* (to include staffing, counseling, community mobilization, integration, follow-up and referrals, lab quality, and monitoring).

In small working groups, the participants made recommendations for each component in HBCT programming. The highlights and commonalities of these recommendations are summarized below.

PREIMPLEMENTATION KEY APPROACHES

The preimplementation phase involves all the planning and preparation required to successfully launch a program. The activities undertaken in this phase of program implementation include the following.

Planning: A crucial step in the roll-out of CT services is planning, from resource allocation to program design to sustainability and monitoring of effectiveness. Recommendations for planning steps and activities include:

- Meeting with government officials, donors, and community stakeholders to seek their strategic and financial commitment to HBCT programming
- Conducting a situational analysis/mapping of prevalence rates; demographic characteristics; sociocultural characteristics including acceptability of HBCT, infrastructure, and referral points for care and treatment; collaborating partners; and existing community HIV activities
- Determining which type of HBCT is most appropriate to employ, door-to-door or index patient, or decide if a mix of both types is best suited for the target area
- Ensuring referral systems have the capacity to provide treatment, care and/or prevention services to those diagnosed with HIV or in serodiscordant partnerships
- Determining target population (men, serodiscordant couples, pregnant women, children, etc.)
- Establishing partnerships with community partners and programs providing prevention, care, and treatment services

- Determine coverage goals and objectives
- Developing a timeframe for implementation.

Policy and Guidelines: It is important to define both the scope and objectives of HBCT considering each country's context and national HIV strategy. Key policy and guideline recommendations follow.

- An HBCT stand-alone policy or provision for HBCT within the national HIV or HCT policy
- Operational/implementation guidelines for HBCT
- Integration of HBCT guidelines with other community-based initiatives (e.g., TB, malaria, family planning, reproductive health, etc.)
- Guidelines on HBCT supervision
- Standard operating procedures
- National child HCT guidelines with clarity of age of consent relative to disclosure
- A testing policy that provides for point of care rapid testing, ideally performed by the counselor.

Training: The strength and breadth of the training program for HCT is essential and will contribute significantly to the overall quality of the resulting program. Key training priorities for programs implementing HBCT are:

- Development and/or adaptation of standard training materials appropriate for countrywide use
- Where appropriate, incorporate HBCT into the different training modules for HCT
- Pre-testing training materials
- Identification of trainers based on a predetermined set of minimum qualifications
- Use of cascade methodology for training (training of trainers)
- Provision of standardized comprehensive, curriculum-based training in HCT for volunteers and community members.

Curriculum should include modules on:

- HIV/AIDS
- Prevention interventions including PMTCT and male circumcision
- Family planning (FP), and TB
- HCT with couples and addressing serodiscordance
- Disclosure (age-appropriate)
- HCT in adolescents and young people
- Early infant diagnosis

- HCT in children
- Communication skills
- Community engagement, including youth
- Stigma and discrimination
- Referral to medical and social services
- Quality assurance (QA) for *both* lab and counseling
- Consider further development of a training program with a diploma in HCT
- Provision periodic refresher courses for counselors, laboratory technicians, and supervisors.

IMPLEMENTATION KEY APPROACHES

Staffing/Human Resources: Well-trained and supported staff are essential to the success of any HBCT program. Recognizing the staffing challenges affecting many health programs in poor resource settings, the following recommendations were made.

- Employ task-shifting, which is an important strategy for increasing access and coverage of HCT services, reducing the burden on health facility staff, minimizing barriers and helping to lower costs associated with delivery of services. Advocate for the use of lay counselors in countries where there are policy restrictions, including the promotion of point-of-care rapid HIV test use by counselors to ensure results are delivered. Training would involve lay counselors from within the community to deliver HBCT services and include peer educators and PLWH.
- Create an HBCT team comprising HCT counselors, supervisors (counselor and laboratory), representatives of the district AIDS commission, laboratory staff, community mobilizers, community health workers, referral coordinators, and village leaders. It is important to outline and clearly define job descriptions for each of the team members.
- Determine of the number of service providers needed depending on coverage.
- Identify criteria/minimum qualifications of counselors. Recommended criteria include the following:
 - Basic education level (completed primary) and the ability to read and write
 - Respected and selected by the community
 - Excellent communication skills
 - Age-appropriate for this employment
 - Having skills and knowledge to handle other health issues
 - Fluent in the local language and knowledgeable of community norms/culture.
- Carefully consider the criteria for HBCT counselors particularly in contexts where there is a shortage of previously trained and experienced counselors.

- Have sufficient supervision staff for counselors (i.e., 1 supervisor per 10 counselors).
- Offer incentives where applicable and possible: providing stipends and/or lunch costs for counselors and other staff (e.g., community mobilizers, lab technicians), conducting retreats with HBCT team members, and providing transport for counselors.
- Ensure that counselors have flexible working hours (i.e., to work weekends and evenings) to find families at home.
- Have counselors reside in the community until the HBCT target is reached.

Community Mobilization/Communication: The mobilization strategy and communication message play a critical role in increasing awareness about, acceptance of, and participation in HBCT services. Key approaches for successful community mobilization are as follows:

- Implement a multifaceted communication strategy for reaching different stakeholders and target groups. Community mobilization should involve PLWH, local leaders, opinion leaders, and other stakeholders at all levels of authority.
- Utilize several forms of mobilization (theater, door-to-door, marketplace outreach, community gatherings, etc.) to ensure a wide reach.
- Develop and disseminate information, education, and communication (IEC) messages and materials that address and allay fears and concerns of the target audience, that are age-appropriate, and specific to the target group (men, couples, youth, etc.).
- Sensitize key stakeholders through meetings and community events.
- Create a standardized, national, community mobilization package.
- Conduct focused events (e.g., campaigns to bring attention to importance of HIV testing).
- Develop communication protocols for addressing the following:
 - Parents, couples, families, and individuals
 - Various cultural, religious, and other psychosocial barriers (rumors, myths, and misconceptions) that affect HBCT uptake
 - Fears related to testing at home.

Counseling: The quality of counseling can affect the uptake of services and the extent to which clients agree to be tested and complete follow-up actions. Quality CT and referral are vital to a successful HCT program. The following table outlines key counseling strategies for HBCT.

Key Counseling Strategies for HBCT	
Issue	Strategy
Counseling skills	<p>Ensure counselors have <i>comprehensive</i> counseling skills to address different populations (children, couples, people with disabilities, etc.) and different issues that may arise (e.g., gender-based violence, alcohol use, etc.) in the HBCT context.</p> <p>Develop a list of skills to be taught and topics to be covered in mentorship programs.</p> <p>Provide integrated counseling (e.g., for FP, TB, sexually transmitted infections [STIs], PMTCT).</p> <p>Provide counselors with job aids that contain key standardized messages.</p> <p>Include case studies and role plays in training.</p> <p>Develop guidelines on disclosure with experienced counselors.</p>
Counseling protocols	<p>Train counselors in both counseling and testing.</p> <p>Provide training on confidentiality issues to all workers in HIV care. Ensure it is included in national protocols.</p> <p>Develop a code of professional and ethical conduct.</p> <p>Include protocols for testing infants and children.</p>
Counselor burnout and fatigue	<p>Develop programs to prevent and relieve burnout (e.g., assigning supportive supervision to counselors with regular debriefings).</p> <p>Determine the appropriate target to be tested per day (households versus patients).</p> <p>Focus on quality not quantity.</p> <p>Develop recommended time limits for different types of counseling sessions.</p>
Supportive supervision	<p>Define minimum supervision requirements in guidelines.</p> <p>Ensure the team includes field supervisors (a ratio of 1 supervisor per 10 counselors is proposed).</p> <p>Provide one-on-one and group supportive supervision.</p> <p>Separate supportive supervision from that of line management.</p>
Referral services	<p>Provide counselors with a referral directory of providers and tools to track referrals.</p>
Legal issues	<p>Provide clarity on consent laws that are barriers to diagnosing children and offer counselors tools and skills to deal with child-headed households, as one example.</p> <p>Provide guidance for handling issues involving a child who is known to have been exposed to HIV where the guardian refuses to have a child tested.</p>
QA	<p>Develop mentorship checklist.</p> <p>Develop client feedback tools (exit interview form).</p> <p>Conduct review meetings.</p> <p>Use observations of HCT for different types of clients.</p> <p>Provide training and refresher courses.</p>

Supervision: Essential to QA is supervision which helps ensure that proper CT techniques are being employed. Equally important is the support and guidance provided to the counselor that contributes to their professional and personal development and can both provide motivation and help to avoid burnout. The following supervision recommendations were voiced:

- Establish supportive supervision policies

- Utilize supervision staff for counselors (i.e., 1 supervisor per 10 counselors) who provide mentoring and coaching and who also observe counseling sessions and testing
- Integrate technical and administrative supervision
- Provide guidance in supply chain management to appropriate staff/volunteers.

Integration: By providing more than just HBCT, integration has the potential to improve access to an array of health services via one entry or access point. Integration may have drawbacks such as diluting the focus on HBCT by diverting attention to various other health concerns. Integration is an important consideration and must be implemented with careful attention to its effectiveness. Participants recommended the following areas for integration with HBCT:

- HIV prevention services and Prevention with Positives (e.g. cotrimoxazole prophylaxis)
- Basic care prevention which may include long-lasting insecticide-treated nets, safe water system (clean water treatment system and storage), and nutritional support
- Family planning and reproductive health services including contraception and screening and treatment of STIs
- TB screening and referral
- Malaria prevention and treatment interventions.

Laboratory Services: To ensure an effective and successful HBCT program, laboratory testing issues must be taken into account. Implementers provided the following key program strategies for laboratory services.

Laboratory Quality	
Issues	Strategies
Rapid test kit supply chain	Ensure adequate projections, consumption data, and storage. Monitor expiration dates on test kits. Protect against contaminants (e.g., moisture) and environment (e.g. heat). Train appropriate staff/volunteers in adherence to national policies on logistics/supply chain management. Standardize test kit type (or types, if services warrant more than one). Ensure documentation and record keeping.
Standard operating procedures (SOPs)	Develop SOPs for HIV testing (e.g., algorithm, timing, interpretation, discrepant test result resolution, etc.) or ensure existing testing SOPs are adequate for an HBCT program. Conduct training and refresher courses in SOPs. Establish referral systems. Develop and post job aids/cue cards. Ensure client confidentiality. Establish frequency of proficiency testing.

QA	<p>Institute regular proficiency testing and/or retesting of samples using DBS.</p> <p>Ensure results of QA processes are fed back to the field in a timely manner.</p> <p>Institute standardized logbooks that promote identification of problems when quality issues arise.</p> <p>Conduct effective commodity management at all levels.</p> <p>Ensure availability of post-exposure prophylaxis (PEP) and hepatitis B vaccination.</p> <p>Ensure waste management and infection prevention.</p>
Laboratory supervision	<p>Include laboratory technician supervisors in HBCT planning and training.</p> <p>Develop supervision tool.</p> <p>Train HBCT supervisors in laboratory processes.</p> <p>Ensure feedback from laboratory supervisors.</p> <p>Establish regular, frequent meetings of staff who work together or hand off tasks to each other, thereby fostering collaboration.</p>
Disposal of medical waste	<p>Develop a comprehensive waste disposal mechanism/system.</p> <p>Install and keep a supply of various waste receptacles.</p> <p>Use the recommended sharps containers.</p> <p>Train relevant staff/volunteers.</p> <p>Implement and maintain central incineration.</p> <p>Design a user-friendly waste disposal kit.</p>
Infection prevention	<p>Have a minimum recommended package/kit.</p> <p>Provide vaccination against hepatitis B.</p> <p>Provide PEP.</p>
Early infant diagnosis	<p>If DBS collection is deemed feasible, identify supplies needed for DBS.</p> <p>Establish system for packaging, storing, processing, and transporting DBS to referral labs.</p> <p>Ensure counselors are adequately trained in DBS collection.</p> <p>Create a feedback process and follow-up with referred clients.</p>

Referrals and Follow-up: Referral and follow-up of clients who have been tested for HIV and diagnosed as HIV-positive to ensure access to care, treatment, and prevention services. Furthermore, follow up of couples in serodiscordant partnerships is critical for prevention of transmission interventions. Important considerations for follow-up and referral include:

- Develop referral approaches and design traceable, national, or standardized referral forms that provide for service feedback, and ensure that the referral process provides patient consent for follow-up from a third party.
- Create a referral database that uses a unique identifier for each client.
- Utilize support group members to track patients after referral.
- Train providers in basic data collection skills including use of referral form.
- Map and create a referral directory with links to a range of relevant service providers, including other health services (e.g., psychosocial support, family planning, etc.).
- Provide follow-up counseling depending on priority (symptomatic, pregnant woman, children) and supported disclosure.

- Create post-test clubs to support stigma reduction and increase disclosure.
- Implement of a physical linkage to referral destination(s), particularly for sick patients.
- Develop a referral monitoring process.
- Define the follow-up period (suggestion is one month).

Monitoring and Evaluation: Central to the successful implementation of any program is the ongoing monitoring of outputs and impact. Monitoring is a recurrent exercise designed to track targets and link program activities with measurable success. Monitoring also allows for corrective action in the event of unforeseen or unplanned results. The following are important considerations for monitoring and evaluation:

- Develop or adapt a monitoring and evaluation framework over which the government has ownership.
- Develop or adapt the national reporting system to capture/store HBCT data.
- Determine data sources, including:
 - National level statistical reports
 - Regional/district information structures
 - Research data (e.g., by catchment area)
 - Partner organizations.
- Develop or adapt user-friendly data collection tools/database for referrals and exit interviews.
- Standardize data collection and reporting. HBCT data should be recorded and aggregated on daily, monthly, quarterly, and biannual bases.
- Conduct routine data quality assessment every six months.
- Review/revise data tools every two years.
- Use personal digital assistants to capture individual and household data.
- Map the target area using data, reports (i.e., Demographic and Health Survey), and geographical positioning systems to locate households.
- Link captured data to medical record systems.
- Analyze data and discuss results with relevant partners/stakeholders.

Quality Assurance: HBCT is a less controlled and more complex intervention than facility-based HCT. Quality is a considerable concern given that supervision is inconsistent and sporadic and counselors are often working alone in the field without direct support. Furthermore, the CT process involves management and expertise by many different cadres: laboratory personnel, logistics staff, community mobilizers and counselors. Key strategies to addressing quality issues in HBCT include:

- Implementing clearly written SOPs that cover a range of environments and encounters that a counselor may face implementing HBCT
- Shortening turnaround time for feedback on QA results for prompt correction to system problems
- Maintaining validation testing for poorly performing sites
- Involving the lab in the planning for the HBCT testing activities, as well as ensuring their role in implementation
- Increasing networking among laboratory and field personnel to foster problem solving
- Enrolling HBCT sites into proficiency testing
- Developing a national external quality assessment scheme at the national level for the HBCT program
- Improving logistics for procuring testing supplies
- Developing or adapting quality improvement indicators
- Developing or adapting supervision tools
- Establishing frequency of submission of reports and make them known to appropriate staff/volunteers
- Ensuring open communications
- Training/designating staff/volunteers to deliver samples
- Establishing regular feedback from central laboratory.

TOOLS FOR IMPLEMENTING HOME-BASED COUNSELING AND TESTING PROGRAMS

Participants gathered in groups to identify the tools necessary for an HBCT program. The suggested tools are presented in the table below. A variety of HBCT tools will be available on the AIDSTAR-One website (www.AIDSTAR-One.com).

Preimplementation Tools	
<i>Tool</i>	<i>Purpose</i>
Situational Analysis Tool	Identify areas/populations that need HBCT.
Referral Directory	Identify existing service delivery institution/partners in an area. Identify peer support groups of PLWH.
Community Meeting Guidelines	Guide community meetings and discussions.
CT Tools	
<i>Tool</i>	<i>Purpose</i>
HBCT Client Data Collection Tool	Collect client data on patient demographics, risk behaviors, pregnant mother's HIV testing status, HIV test results, referral information, and consent.
Client Identification Card	Provide such cards to individuals with their testing status while protecting patient confidentiality.
Job Aids/Cue Cards/Protocol Form/Checklist	Remind workers of key messages to ensure protocol is followed. Provide results interpretation to help HIV client believe the results. Provide laboratory testing algorithm.
IEC Materials	Educate patients.
Data Summary Tool	Summarize weekly/monthly CT activities.
QA Supervisor Checklist	Guide supervision of counseling and laboratory testing.
Log Book/Register	Record information on test kits.
Referral/Linkages	
<i>Tool</i>	<i>Purpose</i>
Referral Form	Provide name of client; referral source, destination, and type of service; reason for referral; date; counselor's name, name(s) of service provider(s), and provider contact information; feedback from referral source.
Reporting	
<i>Tool</i>	<i>Purpose/Recommendations</i>

Form for Reporting Data from Satellite Sites to Central Office	Report monthly data on HBCT activities for central management.
Form for Reporting Data from Districts/Regions to Ministry of Health (MOH)	Report quarterly or bimonthly data on HBCT activities from lower to MOH level.
Satellite Data Form	Record number of households, adults, how many counseled and how many tested, results by gender and couples tested, couples results by age group, overall HIV prevalence, other services provided, and TB assessment.
Referral Data Form	Record number referred for PMTCT, FP, and care. Whether patient went for referral services, and comments and observations.
QA Tools	
<i>Tool</i>	<i>Purpose</i>
Client Exit Interview Form	Gather client perspectives on HBCT services.
HIV Test Kit Consumption Tracking Tool	Ensure kits are used for intended purpose.
Counselor Supervision Tools	List supervision focal points. Provide a checklist for direct observation. Ensure quality counseling and adherence to the counseling protocol.

HOME-BASED COUNSELING AND TESTING MEETING OUTCOMES AND THE WAY FORWARD

At the conclusion of the meeting, participants reached a consensus on its outcomes and recommended that:

- A technical brief on HBCT be developed
- Case studies on HBCT be developed
- A technical working group on HBCT be formed, drawing on participants from this technical consultation
- Generic HBCT guidelines be developed
- An annual implementers forum for HBCT be conducted
- HBCT tools be harmonized
- A database highlighting implementers' and organizations' core competencies be developed
- South-to-south technical assistance exchanges be conducted.

Participants also recommended that AIDSTAR-One, in conjunction with the technical consultation planners, take the lead in determining how these outcomes would be achieved.

CONCLUSION

To move toward universal access to HIV counseling and testing, a mix of intervention models appropriate to the type of HIV epidemic are needed to reach specific target groups and address their needs. While implementation requires ample planning and is not without its challenges, the experiences by the participants from Kenya and Uganda suggest that HBCT can facilitate identifying difficult to reach PLWH, as well as serodiscordant couples. While further evidence is needed, initial findings suggest that in certain settings, HBCT can be cost-effective depending on a country's epidemic, and that it improves access to groups such as men, couples, adolescents and children, and people in remote areas more effectively than other forms of HCT. This consultation describes experiences, challenges, and recommendations of HBCT programming. This report, along with progress on HBCT outcomes and related tools, will be posted on the website at www.AIDSTAR-One.com.

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APPENDIX A: AGENDA

Day 1: Tuesday, November 3, 2009

8:00 a.m. **Registration**

8:30 a.m. **Welcome**

Facilitator: Maria Claudia Escobar, AIDSTAR-One

Kipruto Chesang, CDC

Emma Mwamburi, USAID

Opening Remarks

Peter Cherutich, National AIDS and STD Control Program (NAS COP)

Review of Agenda, Matrix, and Norms

Facilitator: Maria Claudia Escobar, AIDSTAR-One

9:00 a.m. **How Well Do You Know Your HBCT Colleagues?**

Facilitator: Maria Claudia Escobar, AIDSTAR-One

9:30 a.m. **Laying the Foundation: Why Choose HBCT as a Strategy?**

Moderator: Warren Dalal, CDC

Peter Cherutich, NAS COP

Dr. Tumwesigye Tuhwezeine Benson, MOH Uganda

10:15 a.m. **Brief Logistics Reminder**

Matthew Haight, AIDSTAR-One

Break

10:30 a.m. **Putting it into Practice: Standardizing Implementation of HBCT
Preimplementation Activities, HBCT Protocols, Staffing, and Training**

Small Group Work

Facilitator: Maria Claudia Escobar, AIDSTAR-One

12:00 p.m. **Lunch**

1:00 p.m. **Standardizing Implementation of HBCT: Preimplementation Activities, HBCT Protocols, Staffing, and Training**

Sharing of Small Group Work

Facilitator: Maria Claudia Escobar, AIDSTAR-One

2:00 p.m. **Voices on the Ground: Experiences of HBCT in Uganda (Integrated Community Based Initiatives [ICOBI], The AIDS Support Organisation [TASO], and Strengthening HIV Counselor Training [SCOT])**

Moderator: Dr. Tumwesigye Tuhwezeine Benson, MOH Uganda

Emilio Odonoga and Alex Mujuni Rwabs, TASO

Janet Kabatebe Bahizi and Teddy Chimulwa, SCOT

Fred Kusaasira, ICOBI

2:45 p.m. **Afternoon Break**

3:00 p.m. **Energizer**

Emma Mwamburi, USAID

3:10 p.m. **Standardizing Implementation of HBCT: Supervision and Management, Referrals**

Facilitators: Winnie Mutsotso, CDC, and Maria Claudia Escobar, AIDSTAR-One

4:30 p.m. **Temperature Read**

Matthew Haight, AIDSTAR-One

Sign-up for outing on Tuesday after the conference

4:45 p.m. **Welcome Social at the Serena Hotel**

Day 2: Wednesday, November 4, 2009

- 8:30 a.m. **Review of Agenda and Feedback**
Energizer
- 8:45 a.m. **Getting Your Voice Heard: Recap and large group discussion of Preimplementation, HBCT Protocols, Staffing, and Training**
- 9:15 a.m. **Voices on the Ground: Experiences of HBCT in Kenya (Academic Model Providing Access to Healthcare [AMPATH] and The Kenya Medical Research Institute [KEMRI])**
Moderator: Merina Lekore, NASCOP
Samson Ndege, AMPATH
Manase Amolloh, KEMRI/CDC
- 9:45 a.m. **How to Maintain Quality in HBCT**
Moderator: Vincent Wong, USAID
Nelly Akinyi, CDC, Kenya
Willis Muhereza, ICOBI, Uganda
- 10:15 a.m. **Morning Break**
- 10:30 a.m. **How to Maintain Quality in HBCT**
Facilitator: Maria Claudia Escobar, AIDSTAR-One
Small Group Work
- 12:00 p.m. **Voices on the Ground: Experiences of HBCT in Kenya AIDS, Population, and Health Integrated Assistance (APHIA) II Coast, Rift Valley, Western**
Moderator: Ann Ng'ang'a, NASCOP
Dickson Mwakangalu, APHIA II Coast
Tom Ondimu, APHIA II Rift Valley
Beth Barasa, APHIA II Western
- 1:00 p.m. **Lunch**

- 2:00 p.m. **What We Have at Our Disposal: HBCT Tools**
Moderator: Patricia Olouch, CDC
Teddy Chimulwa, SCOT
Peter Cherutich, NASCOP
- 2:30 p.m. **What HBCT Tools are Needed for a Country Starting HBCT?**
Large and Small Group Work
Facilitator: Winnie Mutsotso, CDC
- 4:00 p.m. **Afternoon Break**
- 4:15 p.m. **Energizer**
- 4:20 p.m. **Prevention in HBCT**
Moderator: Kate Vorley, USAID
Ugo Amanyeiwe, USAID
Question and Answer Period
- 4:30 p.m. **Temperature Read**
Matthew Haight, AIDSTAR-One
- 4:45 p.m. **GROUP PHOTO! SMILE!!!!**
- Adjourn **Participant Dinner (optional) offsite**

Day 3: Thursday, November 5, 2009

- 8:30 a.m. **Review of Agenda and Feedback**
Energizer
- 8:45 a.m. **Prevention in HBCT**
Moderator: Kate Vorley, USAID
Ugo Amanyeiwe, USAID

Question and Answer Period

9:10 a.m. **Voices on the Ground: Experiences of HBCT in Kenya (Liverpool Voluntary Counseling and Testing [VCT], International Medical Corps [IMC], Impact Research and Development Organization [IRDO])**

Moderator: Peter Mutie, National AIDS Control Council (NACC)

Peter Shikuku, Liverpool VCT

Steve Adudans, IMC

Rose Adhiambo, IRDO-Tuongane

10:00 a.m. **Morning Break**

10:15 a.m. **Recommended and Best Practices for HBCT**

Small Group Work

11:45 a.m. **Outcomes of this Meeting**

Moderators: Warren Dalal, CDC, and Vincent Wong, USAID

12:30 p.m. **Lunch**

1:30 p.m. **What are the Gaps in HBCT? Needs for Technical Assistance?**

Small Group Work

Facilitator: Maria Claudia Escobar, AIDSTAR-One

2:45 p.m. **Afternoon Break**

3:00 p.m. **Technical Assistance: What is Needed?**

Large Group Discussion

Moderators: Patricia Oluoch, Warren Dalal, CDC, and Vincent Wong, USAID

4:00 p.m. **Closing Remarks**

Nicholas Muraguri, NASCOP

Winnie Mutsotso, CDC

Emma Mwamburi, USAID

4:15 p.m. **Wrap-up and Sharing**
Facilitator: Maria Claudia Escobar, AIDSTAR-One

4:45 p.m. **Final Evaluation**

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