



Assesment of HIV/AIDS surveillance system pilot

Operations research

Full research report

Georgia, 2009



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Acronyms

NCDCPH	(L. Sakvaralidze) National Center of Disease Control and Public Health
VCT	Voluntary Counseling and Testing
STI	Sexually Transmitted Infections
MoLHSA	Ministry of Labor, Health and Social Affairs
PHC	Public Health Center

Summary

Foreword

Assessment (operations research) of HIV/AIDS surveillance pilot in Georgia was conducted in the frames of the project “Establishment of evidence-base for national HIV/AIDS program by strengthening the HIV/AIDS surveillance system in the country” funded by the Global Fund, as a preparatory stage for revision of HIV/AIDS surveillance national guidelines.

Goal of the Research

The goal of the operations research was to assess the performance of a new design of HIV/AIDS routine and sentinel surveillance system, developed in the frames of the project in pilot regions of Tbilisi and Adjara; to reveal the factors hindering effective performance of the system, standard operational procedures and limitations of registration/notification/ reporting forms and to develop recommendations for their revision for countrywide implementation of the new design of the system.

Methodology

Qualitative and quantitative methods of the research were applied in the process of the study.

Quantitative research included questioning of the personnel of facilities by semi-structured instrument, as well as review of records; qualitative research was used for more in-depth analysis of study results and included in-depth interviews with best informants at the central level and focus groups of representatives of various types of facilities participating in routine surveillance system.

Main findings

- In those facilities, where patients are offered voluntary counseling and testing, most standard operational procedures are properly followed, although some of the procedures may be violated.
- In antenatal clinics most of the operational procedures are not followed properly.
- All blood transfusion stations participating in the state program have access to the electronic database, which provides real time information about HIV status of all donors and all variables needed for surveillance; correspondingly, standard operational

procedures defined by guidelines of HIV/AIDS routine surveillance are not followed in majority of blood transfusion facilities, or are followed only as a matter of formality.

- At sentinel sites, none of the standard operational procedures set by sentinel surveillance guidelines are followed completely.

Conclusions

Analysis of the main findings of the study reveals that part of the procedures recommended for functioning of the new design of system are ignored, either partially or completely.

The reasons for revealed limitations can be grouped as follows:

- § non-compliance to regulations
- § deficiency of financial resources
- § lack of knowledge of procedures
- § lack of motivation
- § difficulties with implementation of procedures

Non-compliance to regulations

Main factor inducing non-compliance towards regulations is a lack of relevant administrative levers; in such environment, “violator” of the procedure does not acknowledge its responsibility or does not take it seriously because of absence of appropriate sanctions. An example is a situation, when the confirmatory laboratory does not provide VCT units with results of confirmatory study in a timely manner and does not report to NCDCPH.

Deficiency of financial resources

Financial resources, adequate to the operational expenses needed for implementation of procedures defined by the guidelines are not included in relevant state program; therefore, a simple procedure, such as posting monthly report to NCDCPH in a sealed envelope is not performed. Similarly, because of inadequate allocation of financial resources, antenatal clinics may face a real problem (lack of containers, lack of transportation expenses) when sending samples for confirmatory testing.

Lack of knowledge of procedures

Despite the fact that medical personnel training was conducted for implementation of the reformed system in the frames of the project, and on-site training was carried out by central level experts during their monthly monitoring visits, the study has revealed the cases when the personnel was not familiar with the procedures. This was most visible in regards with laboratory personnel, who were not familiar with instructions of sample taking, storing and transportation, given in the guidelines.

Lack of financial motivation □

It is worthwhile to mention that additional work carried out by VCT specialists during the pilot was remunerated by the project, as predetermined by HIV/AIDS surveillance national plan. The study has revealed that financial motivation was one of the main □ encouraging factors for the VCT specialists for compliance to the procedures according to the instructions.

Similar financial support for the personnel of antenatal clinics and blood transfusion □ stations was not envisaged by the project, which can be regarded as one of the reasons of the fact that most frequently, procedures were violated or ignored in those types of facilities.

Difficulties with implementation of procedures □

The reasons for infringement of certain procedures are organizational/technical difficulties □ related to the practical implementation of the procedure itself, such as assigning test numbers to the pregnant women by receptionists in the antenatal clinics, taking blood sample of pregnant women in separate room, distribution of blood samples in two test-tubes and sending them to the laboratory; therefore, these procedures need fundamental revision.

Recommendations

Routine surveillance with voluntary counseling and testing

Rec.1: VCT-linked standard procedures of routine surveillance require only minimal changes, namely:

- (1) Revising some variables in the reporting form #1 (country of birth, citizenship, risk group, result of the previous test, syphilis, B and C hepatitis)
- (2) Simplifying /updating the registration journal #1a according to the requirements of the reporting form #1, and the needs of VCT specialists
- (3) Adding the separate column to the form #1.1 accompanying the sample, for insertion of the number indicated on the tube.

Routine surveillance without voluntary counseling and testing

Rec. 2: Standard procedures of routine surveillance without VCT require some fundamental changes, namely:

- (1) Changing procedures of registration of pregnant women at the antenatal clinics, assignation of test numbers to them, taking of blood samples and their transportation to the laboratory, considering current practice.
- (2) Cancelling the form #1.1 (accompanying the sample) at antenatal clinics
- (3) Removing some variables (syphilis, hepatitis B and C) from the reporting form #3 at antenatal clinics
- (4) Simplifying data registration journal #1c (removing unused columns, combining dates of admission and blood sample taking)
- (5) Discussing in the working groups the possibility of application of the system used for hepatitis B for confirmatory testing of HIV infection in pregnant women. □
- (6) Cancelling procedures of surveillance designed for blood transfusion stations (registration of donors, assigning test numbers, blood taking and distribution of the samples into two tubes) and ensuring export of the data from donors' electronic database to the electronic information system of surveillance, created in the frames of the project.
- (7) Developing the forms accompanying the laboratory confirmation samples at blood transfusion stations.

General recommendations

Rec. 3: Re-training of the laboratory personnel concerning standard procedures, including blood taking, storage and transportation instructions.

- Rec. 4:** Involving regional public health centers in the transmission of information via paper carriers, to ensure collection of reports and their submission to the NCDCPH.
- Rec.5 :** Elaborating potential changes/recommendations for the regulatory system, to ensure confidentiality. □
- Rec. 6:** Developing procedures of data safety provision and including them in surveillance guidelines.
- Rec. 7:** Elaborating recommendations on administrative mechanisms to be included in normative documents.
- Rec. 8:** During the design of state programs, considering operational expenses needed for the functioning of HIV/AIDS surveillance system, as well as additional remuneration for the personnel responsible for surveillance.

Introduction

Since 2008, Curatio International Foundation, together with National Center of Disease Control and Public Health, Scientific-Practical Center of Infectious Pathology, AIDS and Clinical Immunology, NGOs public union “Bemoni” and informational medical-psychological center “Tanadgoma”, with financial support from the Global Fund, carries out a project, the purpose of which is strengthening of HIV/AIDS surveillance system in the country.

At the initial stage of the project, detailed assessment of the country’s existing system of HIV/AIDS surveillance was conducted. Assessment covered priorities of the national policy, regulatory environment of HIV/AIDS surveillance system, legislative basis, organizational/functional design of the system, information flows, roles, requirements, expectations and motivations of all stakeholders of the system, material/technical strengths and human resources of the system; analysis of needs and factors was performed, recommendations were elaborated for strengthening of the system.

The national working group has been formed in the frames of the project, which prepared the national plan of surveillance of HIV/AIDS and guidelines/protocols of HIV/AIDS routine and sentinel surveillance, registration, notification and reporting forms, and standard operational procedures. Training was conducted for the personnel of narcological, antenatal and TB clinics, blood transfusion stations and penitential institutions in pilot regions – Tbilisi and Batumi, with purpose of implementation of the guidelines.

Piloting of a new design of routine surveillance system was carried out in Tbilisi and Adjara region from January to June 2009.

Operations research was conducted in July 2009, with the aim to assess the pilot and reveal the factors, hindering effective functioning of the new design, as well as negative and positive aspects of standard operational procedures and registration/notification/ reporting forms; to elaborate a set of recommendations based on the study results for revision of the new design of the system prior to its countrywide implementation.

Assessment of the pilot of HIV/AIDS surveillance system is a preparatory stage for revision of national guidelines on HIV/AIDS surveillance.

Presented report of the operations research consists of several chapters:

First chapter “*Goal of the study*” describes the goal of the present operations research.

Second chapter “*Methodology*” describes the methods used for assessment of HIV/AIDS surveillance system pilot.

The next chapter “*Research outcomes*” is a descriptive part of the report: various aspects of HIV/AIDS surveillance system, revealed as a result of pilot assessment are described separately from each other.

The chapter “*Main findings*” covers main findings of the research. □

The next chapter “*Conclusions*” is dedicated to the analysis of research outcomes.

The last chapter “*Recommendations*” is a logical continuation of the previous chapter; it formulates appropriate recommendations for revision of national guidelines on HIV surveillance.

Methodological documents (so called instruments) of the study and quantitative data (tables) are given in the Annexes.

The researchers express their gratitude to all parties who have participated in the study, have dedicated their time and contributed to the study at its various stages, from data collection to their analysis and formulation of conclusions.

Goal of the Research

The goal of the operations research was to assess performance of the new design of HIV/AIDS routine and sentinel surveillance system, developed in the frames of the project, in pilot regions Tbilisi and Adjara; to reveal the factors hindering effective functioning of the system, shortcomings of standard operational procedures and registration/notification/reporting forms; and to elaborate recommendations for their revision with purpose of countrywide implementation of the new design of the system.

Methodology

Qualitative and quantitative research methods were used for conduction of the study.

Quantitative study included questioning of the personnel of the facilities by means of semi-structured instrument, as well as review of records; qualitative research was used for more in-depth study and analysis of the results of quantitative study and included in-depth interviews with best informants at the central level and focus groups of representatives of various types of facilities participating in HIV/AIDS routine surveillance system.

Review of records, questioning of respondents

Review of relevant records in selected facilities and questioning of the respondents from the same facilities by means of face-to-face interviews created a basis for assessment of the degree of compliance to standard operational procedures determined by national guidelines of HIV/AIDS routine surveillance; these procedures included, in particular, assigning unique codes to the patients according to the appropriate methodology, offering pre- and post-test counseling to the patients, collecting blood samples and sending them to the laboratory for HIV testing, filling in registration journals, notification/reporting forms and submitting them. Semi-structured instruments of the quantitative study were prepared individually for various types of facilities. Namely, one type of the instrument was developed for the facilities participating in HIV/AIDS routine surveillance with voluntary counseling and testing (TB clinics, penitentiary institutions, narcological clinics, AIDS Center clinics), second type of the instrument was created for antenatal clinics, the third one for blood transfusion stations and a separate one - for the confirmatory laboratory (Annex 2,



Annex 3, Annex 4, Annex 5,

Annex 6).

Assessment of methodology and operational procedures developed for sentinel surveillance was based on the quantitative study – review of records and questioning respondents by means of face-to-face interviews, using semi-structured questionnaires (Annex 8, Annex 9).

Selection of the facilities

Interventions in the frames of the project were carried out in 2 regions – Tbilisi and Adjara, selected for the study beforehand.

The complete list of medical facilities of both selected regions was drawn up (see Table 1, Table 2, Table 3, Table 4, Table 5), which served as a basis for designation of a sampling universe for selection of research samples.

Target facilities in both regions included two types of facilities: (a) clinics with voluntary counseling and testing (VCT); and (b) clinics without VCT service. First type of facilities involved 4 different subtypes of clinics: narcological clinics, penitentiary institutions, TB clinics and AIDS specialized centers. Second type of facilities involved antenatal clinics and blood transfusion stations. In Tbilisi, HIV confirmatory laboratory was included in the study, additionally.

Considering aims of the research, facilities of each of the above-mentioned types were selected for the study, out of the facilities registered in electronic database of surveillance. When the total number of facilities of a certain type was three or less, all of them were included; when there were four or more facilities of a particular type, the size of the sample was defined as 30% of the sampling universe.

Besides, individual facilities were randomly selected from the lists (by systematic selection). Thus, the following steps were performed for each type of facilities in each of the regions:

Step 1: The size of the sample was determined (all facilities in case of three or less facilities; 30% of facilities in remaining cases);

Step 2: The first facility was randomly selected from the existing list (the random number was suggested by the person, not involved in the study);

Step 3: The step (increment) size was defined as $S=N/n$ where N is a sampling universe and n is a desirable size of the study sample.

As a result, the final research samples selected, consisting of 26 facilities (see tables below for details).

Table 1: Tbilisi, surveillance with VCT

#	Facility	Facilities selected for the research	Sample size/increment/ 1 st random number n/s/x	Number of interviewed specialists
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I. Narcological clinics		1	
1.	JSC Research Institute of Narcology	X	2
II. Penitentiary institutions		1	
1.	Tbilisi Penitentiary Institution	X	1
III. TB clinics		2/3/4	
1.	TB dispensary # 2		
2.	TB dispensary # 3	X	1
3.	Phytio-pulmonological dispensary # 1		
4.	TB dispensary # 5	X	1
5.	National Center of Tuberculosis and Lung		
IV. Specialized AIDS clinic		1	
1.	AIDS Center	X	7
Total		5	
		12	

Table 2: Tbilisi. HIV confirm tory testing □

#	Facility	Facilities selected for the research	Sample size/ increment/ 1 st random number n/s/x	Number of questioned specialists
I. Confirm tory laboratory□		1		
1.	Confirm tory laboratory at the AIDS Center □	X		1
Total		1		
		1		

Table 3: Tbilisi, surveillance without VCT

#	Facility	Facilities selected for the research	Sample size/ increment/ 1 st random number n/s/x	Number of questioned specialists
I. Antenatal clinics		9/4/17		
1.	LLC Antenatal Clinic # 1			
2.	LLC Antenatal Clinic # 3(Treatment/Prev Center # 3)			
3.	LLC Antenatal Clinic # 6	X		1
4.	LLC “Mamaladze and Co”, Antenatal Clinic # 7			
5.	LLC Antenatal Clinic # 8			
6.	LLC Antenatal Clinic # 11			
7.	LLC Antenatal Clinic # 12	X		1
8.	LLC “Estheri”, Antenatal Clinic # 15			
9.	LLC Hospital/Polyclinic Union # 5, Consultation center			
10.	LLC Prevention Center # 1, Antenatal Clinic			
11.	LLC Prevention Center # 4, Antenatal Clinic	X		1
12.	LLC Georgian Railway Antenatal Clinic			
13.	Antenatal Clinic at LLC Treatment/Prevention Center # 4 Varketili-3			
14.	“Hera” treatment center			
15.	LLC Prevention Center # 2	X		1
16.	LLC “Sitsotskhle” (Life), railway consultation center # 2			
17.	K. Chachava Research Institute	X		1
18.	O. Gudushauri National Medical Center			
19.	LLC Maternity House # 1, Sharashidze Medical Center	X		1

20.	LLC Maternity House # 2		
21.	St. Joachim and Anna Maternity House of Georgian Patriarchy	X	1
22.	LLC D. Koridze Maternity House # 4		
23.	LLC Maternity House # 5		
24.	LLC Experimental Maternity House # 1		
25.	LLC Health House “Okros Satsmisi XXI saukune”	X	1
26.	LLC “Gineca”		
27.	LLC “Ultramedi”		
28.	Maternity House “Imedis Klinika”		
29.	LLC “Nino”	X	1
30.	LLC “Intermedi”		
II. Blood Transfusion Stations			2/4/5
1.	Republican Blood Transfusion Station		
2.	Tbilisi Blood Transfusion Station	X	1
3.	Blood Transfusion Department of Republican Central Clinical Hospital		
4.	Blood Transfusion Department of JoAnn Clinic		
5.	Blood Transfusion Department of Research Institute of Hematology	X	1
6.	LLC “Blood Bank” at Iashvili Children’s Republican Hospital		
7.	Blood Bank at Gudushauri National Medical Center		
Total			11

Table 4: Adjara, surveillance with VCT

#	Facility	Facilities selected for the research	Sample size/ increment/ 1 st random number n/s/x	Number of questioned specialists
I. Narcological clinics			1	
1.	Batumi Narcological Clinic	X		1
II. Penitentiary institutions			1	
1.	LLC Penitentiary # 3	X		2
III. TB clinics			1	
1.	LLC Adjara Phtysio-pulmonological Dispensary	X		1
IV. Specialized AIDS clinic			1	
1.	Batumi Infectious Hospital	X		1
Total			4	5

Table 5: Batumi, surveillance without VCT

#	Facility	Facilities selected for the research	Sample size/ increment/ 1 st random number n/s/x	Number of questioned specialists
I. Antenatal clinics			4/3/11	
1.	Maternity House # 1			
2.	Maternal and Child Center	X		1
3.	Polyclinic # 1			
4.	Polyclinic # 2			
5.	Polyclinic # 3	X		1

6.	Tamar Settlement		
7.	LLC Keda District Polyclinic		
8.	Khulo Ambulatory/Polyclinic Union	X	1
9.	Shuakhevi Ambulatory/Polyclinic Union		
10.	Khelvachauri Ambulatory/Polyclinic Union		
11.	LLC Chakvi Village Polyclinic		
12.	LLC Kobuleti Maternity House	X	
II. Blood transfusion stations			1
1.	Batumi Blood Bank	X	1
Total			5

Sentinel Surveillance

For assessment of methodology and operational procedures of sentinel surveillance, research was conducted in two sentinel sites based in STI clinics.

Respondents

The following principles were applied for selection of medical providers for interviewing, in each of the selected facilities:

- VCT (voluntary counseling and testing) specialists of all VCT units were questioned and one laboratory worker as well if there was conducted rapid simple/ELISA methods of HIV testing.
- One person, responsible for registration/notification form of surveillance, was questioned in clinics without VCT; if this person was different from laboratory worker, one laboratory worker was questioned additionally.
- One person, responsible for surveillance and registration/notification form was questioned at sentinel sites, as well as one laboratory worker, conducting HIV testing by ELISA method on site.

Data analysis

Quantitative data were imported and analyzed using SPSS v13.0 software. Analysis mainly had descriptive character.

In-depth interviews

For assessment of degree of satisfaction and needs of stakeholders in regards with new design of the system, in-depth interviews were conducted with the respondents, representing the following organizations/institutions:

Table 6: Respondents of in-depth interviews:

Organization	Respondents
1. Scientific-practical center of infectious pathology, AIDS and clinical immunology	2
2. National center of disease control and public health (departments of surveillance and statistics)	4

The special guiding questionnaire was used for in-depth interviews (Annex 1). The questionnaire covered all the functions involved in the new design of HIV/AIDS surveillance system. Emphasize was made on the gaps/problems, revealed by the quantitative study in regards with implementation of various functions of surveillance.

One of the goals of in-depth interview was to assess degree of overall satisfaction of the respondents with the new system of HIV/AIDS surveillance and to listen to their recommendations for alteration/improvement of the existing system till countrywide replication of the new system.

Discussion in focus groups

Special guiding questionnaires were developed and used for facilitation of group discussions. Discussions were conducted in three different groups. Different types of questionnaires were designed for all three groups.

Each session of discussion in a focus group continued for 1.5 hours on average. Discussions were held in the following groups:

Table 7: Medical facilities participating in VCT-linked routine surveillance

#	Facility	Position	Number
1.	Scientific-practical center of infectious pathology, AIDS and clinical immunology	VCT specialist	2
2.	JSC Research Institute of Narcology	VCT specialist	1
3.	Penitentiary Department	VCT specialist	1
4.	TB dispensary # 2	VCT specialist	1
5.	Phtyso-pulmonological dispensary # 1	VCT specialist	1
6.	National center of TB and pulmonary diseases	VCT specialist	1
7.	TB dispensary # 5	VCT specialist	1
Total			8

Table 8: Blood transfusion stations

#	Facility	Position	Number
1.	Republican blood transfusion station	Center director	1
2.		Laboratory physician	1
3.	Tbilisi city blood transfusion station	Laboratory physician	1
4.	Blood transfusion department of the Central Rep. Clinic	Laboratory physician	1
5.	Blood transfusion department of JoAnn medical station	Transfusion physician	1
6.	Blood transfusion department of the Institute of Hematology and Transfusiology	Head of the department	1
7.	LLC "Blood bank", Iashvili Children's Hospital	Laboratory technician	1
8.	Blood bank at Gudushauri National Medical Center	Laboratory technician	1
Total			8

Table 9: Antenatal clinics

#	Facility	Position	Number
1.	K. Chachava Research Institute of Obstetrics and Gynecology	Laboratory physician	1
2.	St. Joachim and Anna maternity house of Georgian Patriarchy	Head of the laboratory	1
3.	LLC "Esther", Antenatal Clinic # 15	Laboratory physician	1
4.	LLC Antenatal Clinic # 3	Laboratory physician	1
5.	LLC D. Koridze maternity house # 4	Nurse	1
6.	LLC Prevention Center # 1, Antenatal Clinic	Chief midwife of the operating room	1
7.	LLC maternity house # 5	Head of the laboratory	1
8.	LLC experimental maternity house # 1	Laboratory physician	1
Total			8

Each group discussion was directed by two experts: the moderator, who led the actual discussion and the facilitator, whose functions included making records about personal characteristics of the respondents, arranging logistical issues and making notes about discussions. All three discussions were held in Georgian language. All the participants gave their consents for both participation in the discussion and audio recording of the discussion.

All group discussions were audio recorded and detailed transcripts were made subsequently. The transcripts were organized by topics and standard list of the codes was designed.

Research outcomes

HIV/AIDS routine surveillance

Routine surveillance by VCT

Standard procedures of HIV/AIDS surveillance

17 VCT specialists of 9 facilities were questioned in two regions, Tbilisi and Adjara; 14 specialists out of this number were interviewed at worksites.

All interviewed VCT specialists had undergone training on standard operational procedures of HIV/AIDS routine surveillance.

Among the specialists, interviewed at their worksites, only one specialist failed to present the guidelines prepared in the frames of the project.

All VCT specialists know their personal code and code of the facility.

During the pre-test counseling majority of the VCT specialists fill in the form # 1 first, and subsequently transfer the data into registration journal #1a, according to the guidelines.

Completing the variables in the form # 1 is not difficult for VCT specialists.

Two thirds of the interviewed specialists think that assigning the unique code to the patient is an easy procedure; remaining part thinks that the rule of assigning unique codes needs to be simplified, since they face certain difficulties during this procedure, related to obtaining information from the patient; for example, some patients have difficulty with counting the number of letters in their last names.

Certain difficulties have been revealed regarding variable # 10 (result of the previous test):

“It is not clear, which test is meant here: rapid test or confirmatory test”

Four out of nine investigated facilities have laboratories; among these, in one case the patient has to go to the laboratory for blood taking procedure; in remaining three cases the standard procedure is followed – blood is collected from the patient in VCT room or procedure room and then the sample is sent to the laboratory for the primary testing.

The form #1.1, accompanying the sample and the form #1.2 of notification of the result of the primary test are being used in all investigated facilities except one. In one facility the personnel sees no need of these forms, since there are only a few patients visiting per day and the laboratory, where blood is being tested, is located next door to the VCT room.

It has to be mentioned that in some cases the result of the primary test is reported by the lab worker to the VCT specialists verbally, too, in addition to the written notification.

Certain problems, related with receiving results of the confirmatory testing from the confirmatory laboratory exist in both Tbilisi and Adjara regions. VCT specialists (except AIDS Center specialists) complain that usually the confirmatory laboratory does not notify them about the test results, thus they have to phone the laboratory themselves; later on, some of them additionally receive laboratory confirmation result notification form# 2.2. Focused group discussions with VCT specialists revealed some additional problems with the procedure of assigning unique codes to the patients.

.....*“When the client arrives, we agree on the confidentiality from the beginning and tell him/her that this is anonymous. But when we ask about the birth date, month and year, frequently they object and say they would be easily identified by their birth date....”*

.....*“The code has to be definitely encrypted, but the process of code generation is very cumbersome... besides, sometimes it is difficult to correctly identify the letters because of handwriting differences and most probably, when there are lots of forms collected in the NCDCPH, it will become very complicated to enter the codes in the database correctly... It is preferable to use print letters to avoid mistakes....”*

Problems with application of the 15-digit unique code onto the tube were reported as well; that's why usually, the simple code is written on the tube and indicated in the accompanying form.

.....*“The tubes are so small, that it is impossible to write the 15-digit unique codes on them, so we decided to write the numbers according the units and indicate the same numbers in the forms #1.1.”*

Some of the VCT specialists think that use of new forms requires additional time and resources.

.....*“It has complicated my work, earlier I had to fill in only one form now I have to fill in several forms and it takes too much time....”*

Registration journal # 1a

Registration journal # 1a is being kept in all facilities except *Tbilisi scientific-practical center of infectious pathology, AIDS and clinical immunology*. In this center VCT specialists register the patients in the electronic database instead of the journal; the database includes all the variables needed for reporting and is accessible to all VCT specialists of the center.

Out of ten VCT specialists who keep registration journals, only one failed to present the journal for viewing (this was a specialist of penitentiary system and the interview was held outside the facility). Review of records demonstrated that all columns are being filled in properly.

One third of VCT specialists think that some columns in the journal need simplification or even removal. For example, they suggest removing columns “country of birth”,

“citizenship” and “the previous test result”. They also suggest indicating testing date instead of reporting date. Besides, they consider that data on syphilis and hepatitis B and C are unnecessary in this kind of journal.

It was mentioned during focus group discussions that some specialists additionally maintain non-standard journals, where they indicate names of the patients. In TB clinics this approach was explained by the need to find the patients in the hospital for post-test counseling.

....“ I also keep my own journal, where I indicate the name and all other information; if I don’t indicate the name, I will not be able to find the patient in the hospital by the code..... “

..... The journal has to be stored and both code and name should be there. “

Laboratory diagnostics

Only four out of all investigated VCT units have laboratory (Tbilisi AIDS center among them), where primary testing of the patients for HIV infection can be performed.

Out of four interviewed laboratory workers only two had instructions on blood taking, storage and transfer.

One laboratory worker confirmed that blood taking procedure takes place in the laboratory.

None of the laboratory workers (except the personnel of Tbilisi AIDS center) had received information about the result of the confirmatory testing.

Two laboratory workers, who faced the need to send the samples for confirmatory testing, used the form #2.1., accompanying laboratory confirmation sample in this process.

All four laboratories maintain non-standard registration journals. In three cases there was presented a possibility to view the journals. In one case out of three (AIDS center laboratory), the names of the patients, as well as primary and confirmatory test results were indicated; in remaining two cases, test results were given without the personal information about the patients. The journals are stored in the laboratory, in a regular manner; the laboratory is being locked.

Data reporting

None of the investigated facilities uses post service. Four facilities send reporting forms # 1 to the NCDC in sealed envelopes with the help of courier. Majority of the facilities deliver reports without a sealed envelope (send them with courier or deliver themselves).

VCT units of Adjara region send the reports to the regional center of public health, where they collect the reports and send them to NCDCPH.

All facilities provide reports in timely manner, according to pre-determined terms and experience no problems with time schedule of reporting.



Anonymity/confidentiality □

The research has revealed that anonymity of the patients can be ensured in virtually none of the facilities; in the majority of cases the VCT specialists know the names of the patients; although, reporting is based on usage of unique codes, without indication of patient's name.

.....“It is impossible to remain anonymous inside our facility. We see the patients for 8 months and know them by names since opening of the medical card at admission. Anonymity is impossible at our level, but certainly the information is hidden at other levels....“

During the review of records, patients' personal information could not be found in any of the VCT specialists' journals #1a; although, as it was mentioned earlier, VCT specialists keep additional journals with indication of patients' personal information.

The journals are kept in the rooms of VCT specialists, which are kept locked and are not accessible for other persons.

In 6 out of 9 investigated facilities VCT specialists reported that there was a designated person in the facility, responsible for data safety. In 4 facilities the personnel reported availability of written instructions on confidentiality and data safety, but the relevant □ document could be found only in one of the facilities (Batumi Narcology Clinic)

It was revealed during group discussions that often the result of HIV testing is attached to the patient's medical card, which endangers confidentiality. □

HIV/AIDS routine surveillance without VCT

Antenatal clinics

Standard procedures of HIV/AIDS surveillance

In antenatal clinics the interviews were held with persons, responsible for epidemiological surveillance, selected by the heads of the facilities. 13 respondents were interviewed in total, including 11 laboratory physicians and 2 nurses.

All the interviewed specialists have undergone HIV infection surveillance training in the frames of the project. 9 out of them kept surveillance guidelines at worksite.

Majority of the questioned individuals say that instructions given in the guidelines are easy to understand.

In all 13 facilities, blood taking from the pregnant women takes place in the laboratory itself, or in the room for medical procedures by the same laboratory worker, who subsequently performs the testing. In 12 facilities, the simple codes are being assigned to the pregnant women by the same person, who performs testing. Only one of the facilities adheres to the standard methodology, which implies assignation of the test number to the pregnant woman by the receptionist (registrator), who sends her to the laboratory later on.

None of the 13 investigated facilities follows the rule of distributing the blood sample in two different tubes; the personnel explain this by absence of necessity, shortage of tubes and complexity of the procedure.

10 facilities do not keep the form #1.1. In one facility the sample sent to the laboratory is accompanied by the internal form of the facility, which contains name of the pregnant woman and the list of needed tests.

Two interviewed specialists do not perform testing (nurses) and both of them receive the results of primary testing from the laboratory. Besides, seven laboratory workers have said that they inform the gynecologist about the result of the primary test.

During past 6 months none of the facilities have had a case of positive result of primary testing in pregnant women, thus they have never used form # 2.1. Accordingly, the respondents have never had a case of receiving a confirmatory response from the confirmatory laboratory. □

Focused group discussions with representatives of antenatal clinics have additionally revealed the causes of non-compliance to the standard operational procedures. Namely, the practice of registration of the pregnant woman and assignation of the test numbers by the laboratory workers, who perform the testing procedures on them, was explained in the following way:

.....“The patients are referred to the laboratory by the individual physicians. Patients first visit physicians and then come to the laboratory. The gynecologist sends a referral form

with her, which specifies if this is a primary or repeated visit etc. Then the pregnant woman is being registered in the laboratory. If this is a primary visit, she will be registered in this mentioned journal and will be assigned the test number; if this is not the primary visit, she will be registered in another journal

„It would be nice to have a designated person in reception unit who would be responsible for this. But this is complicated, almost impossible....”

Registration/reporting forms

Registration journal #1c is kept in all investigated facilities and could be inspected in each one of them. Review of records has demonstrated that all journal columns are being filed in completely.

Respondents think that registration journal needs some refinement; namely, they suggest adding a separate column for phone numbers; the meaning of the column “date of reporting” is rather unclear and it would be better to combine the columns “date of admission” and “date of blood sample taking”, since these two dates are always the same.

Review of records has revealed one case when the result of HIV primary testing was indicated in the registration journal # 1c, although the corresponding column does not exist in the journal.

The research has revealed 5 facilities, where the laboratory personnel keep their own non-standard journals containing personal information on pregnant women, parallel with registration journals #1c. In 4 cases out of 5, review of journals has revealed that HIV primary testing results are included beside personal information on the pregnant women.

Laboratory diagnostics

Only seven laboratory physicians in investigated antenatal clinics have declared having instructions on blood taking, storage and transfer, although only five out of them were able to present relevant documents.

Although there have not been any suspected positive results of primary testing in any of the facilities during past six months, laboratory workers state that they may face certain problems, if blood transportation for confirmation is needed, such as lack of containers and inadequacy of financial resources.

Data reporting

All 13 investigated facilities report data to the NCDCPH using form # 3, although only 3 out of them comply with instructions that request sending two parts of the form in two separate envelopes. This was explained by the shortage of envelopes and lack of knowledge of instructions.

None of the investigated facilities uses post service. Only two facilities send reporting form # 3 to NCDCPH in a sealed envelope, with the help of courier. Majority of facilities deliver the reports without a sealed envelope, with the help of courier, or personally.

The reports from antenatal clinics of Adjara region are being sent to the regional public health center, collected there and sent to NCDCPH.

Two of the investigated facilities are unable to report timely, in due course, which was explained by the absence of couriers.

Anonymity/confidentiality □

Anonymity of pregnant women is not preserved in antenatal clinics, as standard procedures of patient registration, blood taking and its transportation to the laboratory are violated in all facilities.

In 7 cases (which is more than half of the total cases) registration journals with indication of names and contact information of pregnant women are kept in the rooms, unprotected during the day and may become easily accessible for anybody.

According to 5 respondents, there is a designated person in the facility, responsible for data safety. In 8 remaining facilities there are no such persons, or respondents are not informed about them. The personnel of one facility declared availability of written instructions on confidentiality and data safety in their facility, although the relevant document could not be found.

Group discussions revealed the cases, when gynecologists request test results from the laboratory workers in order to put them in medical cards of the patients. Attaching results of HIV testing to the medical cards of the patients threatens confidentiality. □

Blood transfusion stations

Both quantitative study and focused discussions with representatives of blood transfusion stations revealed that standard operational procedures defined in HIV/AIDS routine surveillance guidelines are not followed in majority of facilities, or are followed only as a matter of formality. This was explained by the existence of donors' electronic database for blood transfusion stations, which covers complete donor information, including the variables needed for the surveillance system. The database is accessible for all facilities included in the state program and provides comprehensive information about all donors tested for HIV on a countrywide scale.

Respondents think that putting the same information on paper carriers and further reporting is useless and waste of time.

Confirmatory laboratory □

The laboratory physician was interviewed during the visit to the confirmatory laboratory; □ she had surveillance guidelines on site and said that instructions on standard operational procedures are easy to understand.

The samples sent from VCT units and Batumi antenatal clinics to the confirmatory □ laboratory are always accompanied by the form #2.1. As for Tbilisi antenatal clinics, there were cases when the sample was sent without the accompanying form.



The samples received by the confirmatory laboratory from other facilities are always in a good condition.

Respondents report that confirmation of primary suspected positive tests never takes more than one week.

The confirmatory laboratory does not inform VCT units, from where the samples had been sent, about the confirmatory test result, and does not report to the NCDPH, as required by the standard operational procedures. Confirmatory laboratory sends a notification only to the epidemiologist of the AIDS center by various means, such a form #2.2 of notification of laboratory confirmation result, or non-standard form.

Results of confirmatory testing are reported to the NDC by the epidemiologist of the AIDS center.

Registration journal of the confirmatory laboratory is kept in a room that is being locked in a regular way.

Sentinel surveillance

Assessment of sentinel sites, established at the premises of STI clinics in Tbilisi and Batumi has revealed that standard operational procedures implied by the sentinel surveillance guidelines are followed in both sites.

Personnel of both sentinel sites have undergone appropriate training; guidelines could be seen on site; personnel think that operational procedures specified by the guidelines are easy to understand and follow.

At each of the sites, the person responsible for epidemiological surveillance is familiar with the facility code, while the laboratory worker of the same site is not familiar with it.

Test number is assigned to the patient by the person responsible for surveillance; blood is taken in doctor's office by the nurse.

Blood sample is always distributed in two tubes; the sample for STI testing is sent to the laboratory immediately; the sample for HIV testing is sent to the laboratory at the end of the day. The HIV testing sample is always marked by the test number.

In case of positive result of primary testing the laboratory sends the sample to the confirmatory laboratory; they have never had problems with transportation; they do not receive results of confirmatory testing from the confirmatory laboratory.

Journal # 2a is maintained properly at both sites, all columns are filled completely.

At the end of the month sentinel sites report to the NCDCPH by means of form # 4, in a sealed envelope, with the help of courier; none of the sites use post service.

Main informants at the central level

Information flows and their management □

In-depth interviews with central level stakeholders of HIV/AIDS surveillance system have revealed that the stakeholders find it important, that new design surveillance system □ embraces the data of any person undergoing voluntary counseling and testing at medical facilities (e.g. high risk individuals, TB patients, prisoners).

The respondents think that for proper functioning of the surveillance system, the data from the lower levels should be reported to the higher levels in the same disaggregated form, as they are collected at the lower level. Although, it has to be mentioned that NCDCPH would prefer organization of the information flows similarly to the reporting practice for other □ infectious diseases, i.e. they suggest monthly reports should be delivered to NCDCPH through relevant district and regional public health centers.

.....I think direct delivery of the forms from the primary facilities to our center is not correct. They should be collected at the regional level and sent to our center only afterwards. It is very complicated to deliver the forms from entire Georgia..“

.....The greatest problem is that delivery of the forms is complicated. They are not able to send reports from the regions in a timely manner.....“

.....It is a very unusual practice that each facility has to come to NCDCPH every month, beside annual reports. Soon it will become impossible, if the reports are not gathered at some place. We think public health system has to interfere somehow, just for collection and not for analysis....“

In their opinion, information collection format is simplified as much as possible and amount □ of variables that have to be collected, registered and transferred by the primary facilities via paper carriers, is minimized; nevertheless, the representatives of NCDCPH have expressed opinion that several variables could be removed from the form # 1 (such as previous test result, country of birth, citizenship); these variables are less interesting for the national surveillance system and they are collected only due to the fact, that the country has to report them to the European Surveillance System (Tessy); the respondents from the *scientific-practical center of infectious pathology, AIDS and clinical immunology* □ have expressed different opinion that even if the country has not signed any official □ memorandum with European Surveillance System, it is still preferable that the country collects and reports information according to Tessy requirements, although reliability of these variables may be questionable.

.....“Although the country have not the same obligations towards Tessy as in case of UNGASS, I still think that Tessy variables should be maintained in the forms and they should be reported, even if the quality of certain data is not the best.... it will be a rather

awkward situation when the data from all other countries appear in European Surveillance System, except Georgian data....“

NCDCPH epidemiologists say that they do not get notifications from the confirmatory laboratory on time, or do not get them at all.

There are frequent errors/gaps in the report forms received from the facilities, which forces the personnel to send the forms back. Frequently the letters in unique codes can not be distinguished which causes duplication of the cases in the database.

Anonymity/confidentiality

In respondents' opinion, the coding system designed in the frames of the project for ensuring personal anonymity and confidentiality is justified and necessary, as it ensures the transfer of information about tested individual from lower to higher levels without personal information.

.....Maybe the coding system has created certain problems, but we have to make a choice, what is more important for us.... we should try to solve the problems caused by the coding, instead of refusing it.....“

Screening of pregnant women

Although Georgia belongs to the countries with low prevalence of HIV infection, and international recommendations suggest sentinel surveillance of pregnant women in low prevalence countries, the respondents think that routine screening of pregnant women should continue for prevention of mother-to-child transmission of infection. They suggest that routine surveillance of pregnant women without voluntary counseling is reasonable, as well.

.....As an epidemiologist, I think that sentinel surveillance is sufficient, as it allows to derive proxy indicators.... there will always be certain omissions during routine surveillance and total coverage can never be achieved.... but of course, routine system is important for prevention of mother-to-child transmission of infection.....“

.....35 infected pregnant women were detected last year and at least that many children were prevented from being infected....“

.....As the surveillance is routine and the state is obliged to support birth of a health child, it is possible to test the mother without VCT.....“

Respondents think that the issue of collection of information about other infections (syphilis, hepatitis B and C) in HIV surveillance system is somewhat problematic and believe that the information collected about these infections by the current system is useless for surveillance, as only the results of rapid tests for syphilis and hepatitis B are included in the system and testing for hepatitis C is not covered by any program at all. It would be more sensible to include only the results of the confirmatory testing in the

system, but this is rather problematic, too, considering organizational/functional design of the country and existing state programs.

The respondents from NCDCPH suggested conducting confirmatory testing of HIV infection and syphilis among pregnant women in NCDCPH, similar to hepatitis B testing. The scheme of transportation of samples for testing for hepatitis B is logistically organized and functional on a countrywide scale. The same scheme could be used for transportation of HIV and syphilis positive samples from antenatal clinics to NCDCPH. This would simplify data collection of hepatitis B and syphilis in HIV infected pregnant women.

Another advantage of conducting confirmatory testing of HIV infection in NCDCPH is that in case of positive confirmatory result pregnant women would not have to wait for the report from the confirmatory laboratory of the AIDS center (which they usually never receive, or receive with a substantial delay); the pregnant woman would be contacted in the shortest period of time and would undergo investigation and post-test counseling. Central level informants suggest using human resources of public health system for investigation of pregnant women, since they have the appropriate experience.

Electronic database of HIV/AIDS surveillance

According to NCDCPH epidemiologists – users of the electronic database of HIV/AIDS surveillance developed in the frames of the project, the database considerably simplifies data processing and epidemiological analysis.

In their opinion, after the replication of the new design of the system throughout the country, which will lead to significant increase of information flow, the personnel of the regional centers should be given a possibility to enter the data into the database; this would simplify management of information flows at the central level.

Main findings

Routine surveillance with voluntary counseling and testing

Standard procedures of HIV/AIDS surveillance

In those facilities, where the patients are offered voluntary counseling and testing, significant part of the standard operational procedures are followed appropriately

- Assigning unique codes to the patients is not difficult for the majority of VCT specialists and this procedure is carried out according to the proper methodology.
- Collecting the variables included in the form # 1 for pre and post-test counseling is not difficult for VCT specialists.
- Definitions of some variables (#4, #8, #10, and #11) in the form #1 need revision/clarification.

Some of the procedures are being violated:

- In VCT units with on-site laboratory, on some occasions the patients themselves are sent to the laboratory for blood taking procedure.
- VCT specialists of the primary facility receive information about the confirmatory test results by phone calls made to the confirmatory laboratory, as the confirmatory laboratory itself does not provide the primary facility with test results, or does it with substantial delay.

Registration journal # 1a

- Registration journal # 1a is kept in all facilities, except Tbilisi Scientific-Practical Center of Infectious Pathology, AIDS and Clinical Immunology, where the patients are registered in existing electronic database.
- Certain columns in the registration journal need simplification or removal.
- On some occasions, VCT specialists keep additional non-standard journals with indication of patients' personal information, which is important for identification of the patients.
- Registration of the data in the journals and maintenance of reporting forms requires additional time resources, especially in large facilities.

Laboratory diagnostics

- Laboratory workers in VCT units are not familiar with standard procedures of blood taking, storage and transportation.
- Laboratory personnel of the VCT units do not receive the confirmatory test results from the confirmatory laboratory.

- The accompanying form # 2.1 is used when the samples are sent for the confirmatory testing. □
- The laboratories maintain non-standard registration journals, where the patients' personal information is usually not included.

Data reporting

- None of the facilities use post service, because of lack of financial resources, needed □ for this procedure.
- In majority of cases, the reports to the NCDCPH are sent without a sealed envelope with the help of a courier.
- VCT units of Adjara region deliver the report forms to the regional public health center, which in its turn ensures their delivery to the NCDCPH.
- All the facilities report in a timely manner, according to the schedule.

Anonymity/confidentiality □

- Anonymity is not preserved in any of the facilities; in majority of cases VCT specialists know patients' names.
- Registration journal # 1a is kept in VCT room, which is usually locked and not accessible for outsiders.
- The result of HIV testing is being attached to the medical card of the patient, which threatens confidentiality. □
- Data safety policy of facilities is either non-existent, or inadequate; accordingly, the person responsible for the data safety is not identified. □

HIV/AIDS routine surveillance without VCT

Antenatal clinics

Standard procedures of HIV/AIDS surveillance

Majority of operational procedures in antenatal clinics do not comply with the guidelines.

- Receptionist assigns test numbers to the pregnant women only in one of the antenatal clinics; in other clinics, test numbers to the pregnant women are being assigned by the laboratory personnel, performing testing procedure; accordingly, anonymity of pregnant women is violated.
- Taking of blood samples from pregnant women for HIV testing is not performed in special rooms in any of the clinics; in all facilities blood samples are collected either in the laboratory itself or in the procedure room by the laboratory worker, who subsequently performs analysis, too.



- Distribution of blood samples in two different tubes is not performed in any of the antenatal clinics; this was explained by the absence of necessity, shortage of tubes and complexity of the procedure.
- After primary testing the laboratory personnel informs gynecologists about the results of primary testing by means of facility's internal test result forms. In exceptional cases, only the limited information is given out (test was conducted or was not conducted).

Registration/reporting forms

- Form # 1.1 is not used in majority of the clinics.
- Registration journal # 1c is maintained. Certain columns need revision (e.g. combining the dates of admission and blood sample taking).
- The result of primary HIV testing has been found in registration journal # 1c.

Laboratory diagnostics

- Laboratory workers of the antenatal clinics are not familiar with instructions on blood taking, storage and transportation.
- Laboratory workers keep non-standard registration journals, where the personal information on pregnant women and sometimes – results of primary tests are included.
- Although there has been no need of sending samples for confirmation during past 6 months, it is evident that potential problems related with transportation of samples (lack of containers, financial problems) exist. □

Data reporting

- Procedure of form # 3 reporting is often violated, which is mainly explained by the absence of financial support: □
 - Usually both parts of the form # 3 are sent together without a sealed envelope.
 - None of the facilities uses post service; reporting forms are usually sent with the help of a courier.
- Antenatal clinics of Adjara region deliver reporting forms to the regional public health center which in its turn ensures delivery of the forms to the NCD/CPH.
- All the facilities report in a timely manner, according to the schedule.

Anonymity/confidentiality □

- Anonymity of the pregnant women is not preserved in antenatal clinics; standard procedures of patient registration, blood taking and transportation to the laboratory are violated in all investigated facilities.



- Data safety policy does not exist in the facilities and accordingly, there is not a designated person responsible for data safety.
- Usually, test results of pregnant women are being attached to the medical cards; confidentiality is not preserved. □

Blood transfusion stations

- All blood transfusion stations participating in the state program have access to the electronic database, which provides a real-time information about HIV status of investigated donors and about all the variables needed for surveillance; accordingly, standard operational procedures defined by the surveillance guidelines are not □ followed in majority of blood transfusion stations, or are followed only on a formal level:
 - Patients are not registered in standard registration journals; electronic database is used instead.
 - Reporting forms are not maintained.
 - Reports are not made to the NCDCPH.

Central level (NCDCPH)

- There are many errors and inaccuracies in the reports sent from the primary facilities to the NCDCPH.
- Reports from the confirmatory laboratory are received with a delay, or are never □ received.
- The data collected on syphilis and hepatitis B and C by the new design of the system represent results of the primary tests, not confirmatory tests and therefore, □ are not useful for the surveillance system.
- The practice existing in regards with hepatitis B testing in pregnant women □ could be used for screening and confirmation of HIV infection in pregnant women. □
- Existence of the disaggregated information on the central level is important for routine surveillance of high risk groups, although this complicates the stream of information flows. □
- Regional public health system should be included in collection of reports and their delivery to the NCDCPH.

Sentinel surveillance

- Standard operational procedures of sentinel surveillance, implied by the guidelines, are not completely followed at the sentinel sites.

Conclusions

Analysis of the main findings of the research has demonstrated that some of the procedures recommended for operation of the new design of the system are not performed, or are performed only partially.

The reasons of the detected inadequacies can be grouped as follows:

- non-compliance towards regulations
- lack of financial resources
- lack of knowledge or ignorance of procedures
- lack of motivation
- difficulties with practical implementation of procedures

Non-compliance towards regulations

Main factor conditioning non-compliance towards regulations is absence of relevant administrative levers; in such environment the ‘violator’ of the procedure does not recognize his/her own responsibility or does not take it seriously, as no sanctions are taken against the violation. For example, confirmatory laboratory does not provide VCT units with test results on time and does not report to NCDCPH.

Lack of financial resources

Financial resources corresponding to operational expenses needed for implementation of the procedures defined by the guidelines are not included in relevant state programs; as a result, relatively easy procedure, such as posting monthly reports in sealed envelopes, can not be performed. Similarly, due to inadequate allocation of financial resources, antenatal clinics may face a real problem, as soon as sending samples for confirmatory research is required (lack of containers, lack of financial resources).

Lack of knowledge about procedures

Despite the fact that the training of medical personnel for implementation of the reformed system has been conducted in the frames of the project, and central level experts carry out on-site training activities during their monthly monitoring visits, the research has revealed the cases when the personnel was not familiar with the procedures. This was especially noticeable in regards with laboratory personnel, who were not familiar with instructions on taking, storage and transportation of samples, defined by the guidelines.

Lack of financial motivation

It has to be mentioned that during the pilot, remuneration for additional work carried out by the VCT specialists in the frames of the surveillance system, was covered by the



project, as it was defined by the national HIV/AIDS surveillance plan. The research has revealed that financial motivation was one of the main supporting factors for VCT specialists for proper implementation of the procedures according to the instructions.

The project did not provide the similar financial support to the personnel of antenatal clinics and blood transfusion stations, which can be considered as one of the causes for frequent violation/ignorance of the procedures in these facilities.

Difficulties with practical implementation of the procedures

Certain procedures fail to be implemented because of organizational/technical difficulties related with practical implementation of these procedures, such as assigning test numbers to the pregnant women by the receptionists in antenatal clinics, taking of blood samples from the pregnant women in separate rooms, distribution of blood samples into two tubes and sending them to the laboratory... accordingly, these procedures need fundamental revision.

Recommendations

Routine surveillance with voluntary counseling and testing

Rec.1: VCT-linked standard procedures of routine surveillance require only minimal changes, namely:

- (1) Revising some variables in the reporting form #1 (country of birth, citizenship, risk group, result of the previous test, syphilis, B and C hepatitis)
- (2) Simplifying /updating the registration journal #1a according to the requirements of the reporting form #1, and the needs of VCT specialists
- (3) Adding the separate column to the form #1.1 accompanying the sample, for insertion of the number indicated on the tube.

Routine surveillance with voluntary counseling and testing

Rec. 2: Standard procedures of routine surveillance without VCT require some fundamental changes, namely:

- (1) Changing procedures of registration of pregnant women at the antenatal clinics, assignation of test numbers to them, taking of blood samples and their transportation to the laboratory, considering current practice.
- (2) Cancelling the form #1.1 (accompanying the sample) at antenatal clinics
- (3) Removing some variables (syphilis, hepatitis B and C) from the reporting form #3 at antenatal clinics
- (4) Simplifying data registration journal #1c (removing unused columns, combining dates of admission and sample taking)
- (5) Discussing in the working groups the possibility of application of the system used for hepatitis B for confirmatory testing of HIV infection in pregnant women. □
- (6) Cancelling procedures of surveillance designed for blood transfusion stations (registration of donors, assigning test numbers, blood taking and distribution of the samples into two tubes), and ensuring export of the data from donors' electronic database to the electronic information system of surveillance, created in the frames of the project.
- (7) Developing the form accompanying the laboratory confirmation sample at □ blood transfusion stations.

General recommendations

Rec. 3: Re-training of the laboratory personnel concerning standard procedures, including blood taking, storage and transportation instructions.

- Rec. 4:** Involving regional public health centers in the transmission of information via paper carriers, to ensure collection of reports and their submission to the NCDCPH.
- Rec.5 :** Elaborating potential changes/recommendations for the regulatory system, to ensure confidentiality. □
- Rec. 6:** Developing procedures of data safety provision to be included in surveillance guidelines.
- Rec. 7:** Elaborating recommendations on administrative mechanisms to be included in normative documents.
- Rec. 8:** During the design of state programs, considering operational expenses needed for the functioning of HIV/AIDS surveillance system, as well as additional remuneration for the personnel responsible for surveillance.

Annex 1: Questionnaire for in-depth interview with main informants

Introduction

My name is XXXXX.

You are participating in an assessment carried out by the Curatio International Foundation in the frames of HIV/AIDS surveillance system strengthening program, funded by the Global Fund. In 2008, in the frames of this project the national experts with technical support from Curatio International Foundation developed a new design of HIV/AIDS surveillance system, national guidelines on HIV/AIDS surveillance, new registration, notification and reporting forms and journals, standard operational procedures. The pilot of the new design of the system will take place in January-June 2009, in Tbilisi and Adjara region. The purpose of this research is to assess the pilot and reveal any gaps and limitations of the new design of the system. Today, I would like to have a 30-minute talk with you about your opinion regarding the new system of HIV/AIDS surveillance, new reporting/registration forms and journals, standard operational procedures, about the factors hindering proper operation of the system and your suggestions – what needs to be improved in this direction.

Let me remind to you that your participation in this interview is voluntary. The information obtained by this interview is entirely confidential.

You have a right to refuse to answer any question during the interview, or to end the interview at any moment.

For practical purposes, interview is being recorded on audio tape, which will be used for preparation of audio transcripts. To preserve confidentiality, the audio tape will be destroyed after 6 months. Your name and other personal information will be removed from the transcript. The results of this assessment can be used for the publications, but without identification of participant's names.

I have several specific questions, which I will ask during the interview.

Management of information flows

First of all, let us discuss organization of the information flows in the new design of the system:

1. How do you think, is it important that data of all individuals who have applied to the medical facility for voluntary counseling and testing (such as high risk individuals, TB patients, prisoners) are included in the surveillance system?
2. Would you change anything in the flow of information flow? (Do you think that reporting forms from all facilities should be sent to the National Center of Disease Control? If no, what is your suggestion? What would you change?)

3. Do you agree that for proper functioning of the surveillance system, data reporting from the lower level to the upper level should be done according to the international recommendations, i.e. in the same disaggregated form, as they were collected at the lower level? (If the respondent does not agree, ask what does he/she disagree with, and why?)
4. How do you think, is the format of collection of information simplified as much as possible? In other words, is number of the variables, which facilities have to collect, register and further transfer via paper carriers, as small as possible?

Anonymity/confidentiality. Screening of pregnant women

1. Do you approve the coding system designed in the frames of the project for protection of anonymity and confidentiality? Do you think that information about the tested person should travel from the lower level to the upper level anonymously?
2. Do you think that routine screening of pregnant women is necessary, instead of sentinel surveillance recommended for low prevalence countries?
3. Do you approve routine screening of the pregnant women without voluntary counseling?
4. From the epidemiological or preventive point of view, is it important to know the prevalence of infections other than HIV (such as syphilis, hepatitis B and C) in pregnant women?

Organizational/functional design

1. In your opinion, who should provide post-test counseling to the pregnant woman in case of detection of HIV infection?
2. (Ask about delegating this function to the AIDS Center on the contract basis, considering limited number of infected pregnant women).
3. What problems do you encounter in regards with proper implementation of HIV/AIDS surveillance function in the country by the NCDCPH, including reporting to the international organizations? (Ask about de facto implementation of the function by the AIDS center, human resources etc.)
4. In your opinion, to what extent will the electronic database designed in the frames of the project assist analysis of epidemiological situation?

Recommendations

5. What are your recommendations?

Thank you for providing useful information.

Annex 2: Review of records/questionnaire instrument for VCT units (1)

VCT specialist

Interviewer: _____ Questionnaire # 1_

Region _____ Facility _____

Interview has to be held personally with VCT specialist, who has worked according to presented methodology during the entire pilot.

Instruction:

1. The question intended for the interviewer is marked accordingly. This question is intended for you, do not ask the respondent.
2. Do not read out possible answers. If complete answer can not be obtained, then try to clarify.

I.	VCT ROOM
1.	<i>[To the interviewer]. Assess the room.</i> Is VCT room intended for only one counselor and one patient? <ul style="list-style-type: none"> .. Yes .. Hard to assess .. No, <i>go to question 3</i>
2.	Is this room intended only for you, or for other personnel, too? <ul style="list-style-type: none"> .. Only for me .. For other personnel, too, and we work at the same time .. For other personnel, too, but we work at different times
II.	GUIDELINES, PROCEDURES
3.	Have you had training on HIV surveillance? <ul style="list-style-type: none"> .. Yes .. No
4.	Do you have guidelines on HIV surveillance? <ul style="list-style-type: none"> .. Yes <i>Ask the respondent to show you the guideline. The document could be observed:</i> .. Yes .. No
5.	Are instructions, given in the guidelines easy to understand? <ul style="list-style-type: none"> .. Yes .. No .. Partially
6.	Do you know your, as of VCT specialist's code? <ul style="list-style-type: none"> .. Yes .. No
7.	Do you know your facility's code? <ul style="list-style-type: none"> .. Yes .. No
8.	During the pre-test counseling, which document do you complete first, the form #1 or the □ journal? <ul style="list-style-type: none"> .. Form # 1 .. Registration journal
9.	Are the variables of the form easy to understand for you, or easy to operate with? Namely:
9.1.	Unique code <ul style="list-style-type: none"> .. Yes .. No If No, explain the reason:
9.2.	Previous test result <ul style="list-style-type: none"> .. Yes .. No

	If No, explain the reason:
9.3.	Way of transmission .. Yes .. No If No, explain the reason:
9.4.	Hetero sub-category .. Yes .. No If No, explain the reason:
9.5.	Mother-to-child transmission subcategory .. Yes .. No If No, explain the reason:
10.	Where does blood taking from the person applying for VCT take place? (<i>Marking more than one answer is possible</i>) .. In VCT room, by the nurse (laboratory worker) .. Patient is sent to the laboratory .. Other _____
11.	Do you complete the form accompanying the sample (#1.1)? .. Yes, completely .. Yes, partially (only code portion) .. No, I write the code on a separate piece of paper .. No
12.	How does your laboratory inform you about the primary test result? .. By means of form # 1.2 .. Verbally, we work in the same room .. Other _____
13.	Does the laboratory keep its own registration journal? .. Yes .. No .. I don't know
14.	Who receives first the final test result from the confirmatory laboratory? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .. Myself .. Laboratory .. Other _____
15.	How does the confirmatory laboratory inform you about the final test result? <input type="checkbox"/> <input type="checkbox"/> (<i>More than one answer is possible, ask further</i>) .. By means of form # 2.2, in a sealed envelope .. By means of form # 2.2, in open manner (without a sealed envelope) .. By phone .. Other _____
16.	In how much time does the confirmatory laboratory provide the final test result? <input type="checkbox"/> <input type="checkbox"/> .. 2 weeks .. 3 weeks .. 4 weeks .. Other _____
17.	How do the patients learn about the test results? .. We invite them for post-test counseling .. By phone .. Other: _____
18.	In how much time after the test are the patients invited to learn about the results? .. 2 weeks .. 3 weeks .. 4 weeks

	<p>.. We ask the to make a phone call and find out <input type="checkbox"/> if the result has returned or not</p> <p>.. Other: _____</p>
19.	<p>How do you report using form #1?</p> <p>.. Form # 1 is being posted in a sealed envelope</p> <p>.. Form # 1 is being carried by the courier in a sealed envelope</p> <p>.. Form # 1 is being carried by the courier without a sealed envelope</p> <p>.. Other _____</p>
20.	<p>When do you report using form #1?</p> <p>.. Before 25th of each month</p> <p>.. After 25th of each month. Explain the reason.</p>
21.	<p>Do you encounter any problems while reporting using the forms?</p> <p>.. Yes. <i>Specify the problems:</i></p> <p>.. No</p>
<p>III. Using registration journal (#1a)</p>	
22.	<p>Do you use journal #1a for data registration?</p> <p><i>Match the answers with corresponding scores:</i></p> <p>.. 1- No, I have not used it;</p> <p>.. 2- I only use several columns;</p> <p>.. 3 –I use nearly all columns;</p> <p>.. 4 – I use all columns;</p> <p><i>If the answer is 1 or 2, explain why? (don't read out the following options, just match the respondent's answer with corresponding line; more than one answer is possible)</i></p> <p>.. I don't get paid for this job</p> <p>.. I don't have enough time to fill in the journal <input type="checkbox"/></p> <p>.. The journal does not respond my needs; I need to record different information. <i>Explain:</i></p> <p>.. Other:</p>
<p>Ask the respondent, to show you the registration journal # 1a.</p>	

		Unique Code (1)	District (2)	Country of birth (3)	Citizenship (4)	Date of birth (5)	Sex (6)
23.	<i>[To the interviewer]:</i> Was the column completed?	“ Yes ” No	“ Yes ” No	“ Yes ” No	“ Yes ” No	“ Yes ” No	“ Yes ” No
24.	<i>[To the respondent]:</i> Would you change anything in this column?	“ Yes ” No If yes, please explain	“ Yes ” No If yes, please explain	“ Yes ” No If yes, please explain	“ Yes ” No If yes, please explain	“ Yes ” No If yes, please explain	“ Yes ” No If yes, please explain
		Risk group (7)	Previous test result (8)	Primary test result (9)	Confirmation test result (10)	Syphilis test result (11)	Hepatitis C test result (12)
25.	<i>[To the interviewer]:</i> Was the column completed?	“ Yes ” No	“ Yes ” No	“ Yes ” No	“ Yes ” No	“ Yes ” No	“ Yes ” No
26.	<i>[To the respondent]:</i> Would you change anything in this column?	“ Yes ” No If yes, please explain	“ Yes ” No If yes, please explain	“ Yes ” No If yes, please explain	“ Yes ” No If yes, please explain	“ Yes ” No If yes, please explain	“ Yes ” No If yes, please explain
		Hepatitis B test result (13)	HIV transmission way (14)	Hetero/Mother-to-child transmission way (15)	Referral (16)	Date of reporting (17)	
27.	<i>[To the interviewer]:</i> Was the column completed?	“ Yes ” No	“ Yes ” No	“ Yes ” No	“ Yes ” No	“ Yes ” No	
28.	<i>[To the respondent]:</i> Would you change anything in this column?	“ Yes ” No If yes, please explain	“ Yes ” No If yes, please explain	“ Yes ” No If yes, please explain	“ Yes ” No If yes, please explain	“ Yes ” No If yes, please explain	

29.	<p>Would you add anything to this journal?</p> <p>.. Yes. Please, explain:</p> <p>.. No</p>
30.	<p><i>[To the interviewer]:</i> Is patient's name indicated anywhere in the journal?</p> <p>.. Yes .. No</p>
31.	<p><i>{To the interviewer}.</i> Registration journal is stored:</p> <p>.. In VCT room and is accessible to others</p> <p>.. In VCT room and is not accessible to others (the room is being locked, the cabinet is being locked)</p> <p>.. Other. <i>Please, explain:</i></p>
32.	<p>Would you add anything to this journal?</p> <p>.. Yes. Please, explain:</p> <p>.. No</p>
33.	<p>Where is the registration journal kept, usually?</p> <p>.. In the room, which is being locked, or in the locked cabinet.</p> <p>.. In the room</p> <p>.. Other. <i>Please, explain:</i></p>
34.	<p>Is there any designated person in the facility, responsible for data safety?</p> <p>.. Yes .. No .. I don't know</p>
35.	<p>Does the facility have a special document on data safety and confidentiality requirements/procedures?</p> <p>.. Yes. <i>Ask the respondent, to show you the document. Could the document be observed?</i></p> <p>.. Yes .. No</p> <p>.. No</p> <p>.. I don't know</p>
36.	<p>Do you have any other remarks/ wishes?</p>

Annex 3: Review of records/quest. instrument for the laboratory of VCT unit (2)

Interviewer: _____ Questionnaire #2 _

Region _____ Facility _____

Interview has to be held with the laboratory worker, who personally participates in primary testing of VCT patients.

1. The question intended for the interviewer is marked accordingly. This question is intended for you, do not ask the respondent.
2. Do not read out possible answers. If complete answer can not be obtained, then try to clarify.

I.	GUIDELINES, PROCEDURES
1.	<p>Do you have instructions on blood taking, storage and transportation? .. Yes <i>Ask the respondent, to show you the instructions. Could be instructions seen?</i> .. Yes .. No .. No</p>
2.	<p>Does taking of blood samples from the patients, who are visiting for the counseling, take place in your room (laboratory)? .. Yes. .. No. <i>Go to question 5.</i></p>
3.	<p>Does the patient bring unique code with him/her? .. Yes, it stands in the form # 1.1, accompanying the sample. .. Yes, the unique code is written on the piece of paper. .. No</p>
4.	<p>Do you ask the patient his/her name? .. Yes .. No</p>
5.	<p>Is the sample accompanied by the form #1.1? .. Yes .. No</p>
6.	<p>Do you complete the form #1.2 of notification of laboratory test result? □ .. Yes. <i>Go to question 8.</i> .. No</p>
7.	<p>How do you inform the VCT specialist about the test result? .. Verbally, we work in the same room .. Other _____</p>
8.	<p>Do you personally receive information about the final test result from the confirmatory □ □ laboratory? .. Yes .. No</p>
9.	<p>Who is the first person to learn about the final test result from the confirmatory laboratory? □ □ □ .. Myself .. VCT specialist .. Other _____ .. I don't know</p>

10.	<p>How does the confirmatory laboratory inform you about the final test result? <input type="checkbox"/> <input type="checkbox"/></p> <ul style="list-style-type: none"> .. By the form # 2.2, in a sealed envelope .. By the form # 2.2, in open manner (without a sealed envelope) .. By phone .. Other _____ .. I don't know 																		
11.	<p>Do you complete the form #2.1 accompanying laboratory confirmation sample? <input type="checkbox"/></p> <ul style="list-style-type: none"> .. Yes .. No. Explain the reasons: 																		
12.	<p>Do you encounter problems with transportation of samples?</p> <ul style="list-style-type: none"> .. Yes. Please, specify: .. No 																		
13.	<p>Do you register the testing information in the journal?</p> <ul style="list-style-type: none"> .. Yes. <i>Ask the respondent, to show you the registration journal</i> .. No 																		
14.	<p><i>[To the interviewer]. Are the following fields present in the journal, and are they completed? <input type="checkbox"/></i> <i>Mark the appropriate box, if the field is completed at least once <input type="checkbox"/></i></p> <table border="1" data-bbox="326 758 1339 1052"> <thead> <tr> <th data-bbox="326 758 789 789">Field is present</th> <th data-bbox="789 758 1339 789">Field is completed</th> </tr> </thead> <tbody> <tr> <td data-bbox="326 789 789 821">.. Code</td> <td data-bbox="789 789 1339 821">.. Code</td> </tr> <tr> <td data-bbox="326 821 789 852">.. Name</td> <td data-bbox="789 821 1339 852">.. Name</td> </tr> <tr> <td data-bbox="326 852 789 884">.. Telephone</td> <td data-bbox="789 852 1339 884">.. Telephone</td> </tr> <tr> <td data-bbox="326 884 789 915">.. District</td> <td data-bbox="789 884 1339 915">.. District</td> </tr> <tr> <td data-bbox="326 915 789 947">.. Risk group</td> <td data-bbox="789 915 1339 947">.. Risk group</td> </tr> <tr> <td data-bbox="326 947 789 978">.. Primary test result</td> <td data-bbox="789 947 1339 978">.. Primary test result</td> </tr> <tr> <td data-bbox="326 978 789 1010">.. Confirmatory test result <input type="checkbox"/></td> <td data-bbox="789 978 1339 1010">.. Confirmatory test result <input type="checkbox"/></td> </tr> <tr> <td data-bbox="326 1010 789 1052">.. Other identification signs <input type="checkbox"/></td> <td data-bbox="789 1010 1339 1052">.. Other identification signs <input type="checkbox"/></td> </tr> </tbody> </table>	Field is present	Field is completed	.. Code	.. Code	.. Name	.. Name	.. Telephone	.. Telephone	.. District	.. District	.. Risk group	.. Risk group	.. Primary test result	.. Primary test result	.. Confirmatory test result <input type="checkbox"/>	.. Confirmatory test result <input type="checkbox"/>	.. Other identification signs <input type="checkbox"/>	.. Other identification signs <input type="checkbox"/>
Field is present	Field is completed																		
.. Code	.. Code																		
.. Name	.. Name																		
.. Telephone	.. Telephone																		
.. District	.. District																		
.. Risk group	.. Risk group																		
.. Primary test result	.. Primary test result																		
.. Confirmatory test result <input type="checkbox"/>	.. Confirmatory test result <input type="checkbox"/>																		
.. Other identification signs <input type="checkbox"/>	.. Other identification signs <input type="checkbox"/>																		
15.	<p><i>[To the interviewer]. Registration journal is stored:</i></p> <ul style="list-style-type: none"> .. In the room (office), accessible for others <input type="checkbox"/> .. In the room, not accessible for others (the room is being locked, the cabinet is being locked) .. Other. <i>Clarify:</i> 																		
16.	<p>Where do you usually keep registration journal?</p> <ul style="list-style-type: none"> .. In the room, which is being locked, or in the locked cabinet. .. In the room .. Other. <i>Please, explain:</i> 																		

Annex 4: Review of records/ quest. instrument for specialized AIDS clinics (6)

Laboratory worker:

Interviewer: _____ Questionnaire # 6_

Region _____ Facility _____

Interview has to be held with the laboratory worker, who personally receives the samples sent from the facilities, performs confirmatory testing, registration and reporting.

1. The question intended for the interviewer is marked accordingly. This question is intended for you, do not ask the respondent.
2. Do not read out possible answers. If complete answer can not be obtained, then try to clarify.

1.	GUIDELINES, PROCEDURES
1.	Have you had training on HIV surveillance? .. Yes .. No
2.	Do you have guidelines on HIV surveillance? .. Yes <i>Ask the respondent to show you the guidelines. The document could be observed:</i> .. Yes .. No .. No
3.	Do you have instructions on blood taking, storage and transportation? .. Yes <i>Ask the respondent to show you the guidelines. The document could be observed:</i> .. Yes .. No .. No
4.	Are the instructions given in the guidelines easy to understand? .. Yes .. No .. Partially
5.	Are the received samples, marked with unique codes, accompanied by the form # 1.2? .. Yes, always .. Often .. Rarely .. Never
6.	Are the samples, received from Tbilisi and Adjara antenatal clinics, accompanied by the form # 1.2? .. Yes, always .. Often .. Rarely .. Never
7.	Are samples, marked with unique codes, received in good condition? .. Yes, always .. Yes, often .. Yes, but rarely
8.	Are the samples, received from Tbilisi and Adjara antenatal clinics, in good condition? .. Yes, always .. Yes, often .. Yes, but rarely
9.	What is the timeframe for confirmation of primary test results? □ .. 1 week .. 2 weeks .. 3 weeks

	<ul style="list-style-type: none"> .. 4 weeks .. Other: _____ <p>If time, needed for confirmation is more than 2 weeks, what is the reason? <input type="checkbox"/></p>		
10.	<p>Which institution do you inform about positive result of confirmatory test? (More than one answer is possible; let the respondent list them himself/herself. If some of the options were not named, ask separately about each one).</p> <ul style="list-style-type: none"> .. National Center of Disease Control .. Epidemiologist of the AIDS Center .. VCT unit .. Antenatal clinics .. Other referring institution .. Other _____ 		
11.	<p>How, and in what form do you inform each of the above-listed facilities about the final test result?</p>		
a.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%; padding: 5px;"> <p>National Disease Control Center</p> <ul style="list-style-type: none"> .. By the form # 2.3 of notification of laboratory confirmation result <input type="checkbox"/> .. By the form # 4.2 of notification of laboratory confirmation result <input type="checkbox"/> .. Other _____ </td> <td style="width: 40%; padding: 5px;"> <ul style="list-style-type: none"> .. Post in the sealed envelope .. In the sealed envelope, with the help of courier .. In open manner (without a sealed envelope) with the help of courier .. By phone .. Other _____ </td> </tr> </table>	<p>National Disease Control Center</p> <ul style="list-style-type: none"> .. By the form # 2.3 of notification of laboratory confirmation result <input type="checkbox"/> .. By the form # 4.2 of notification of laboratory confirmation result <input type="checkbox"/> .. Other _____ 	<ul style="list-style-type: none"> .. Post in the sealed envelope .. In the sealed envelope, with the help of courier .. In open manner (without a sealed envelope) with the help of courier .. By phone .. Other _____
<p>National Disease Control Center</p> <ul style="list-style-type: none"> .. By the form # 2.3 of notification of laboratory confirmation result <input type="checkbox"/> .. By the form # 4.2 of notification of laboratory confirmation result <input type="checkbox"/> .. Other _____ 	<ul style="list-style-type: none"> .. Post in the sealed envelope .. In the sealed envelope, with the help of courier .. In open manner (without a sealed envelope) with the help of courier .. By phone .. Other _____ 		
b.	<p>Epidemiologist of AIDS Center</p> <ul style="list-style-type: none"> .. By the form # 2.2 of notification of laboratory confirmation result <input type="checkbox"/> .. Verbally .. Other _____ 		
c.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%; padding: 5px;"> <p>VCT unit</p> <ul style="list-style-type: none"> .. By the form # 2.2 of notification of laboratory confirmation result <input type="checkbox"/> .. Other _____ </td> <td style="width: 40%; padding: 5px;"> <ul style="list-style-type: none"> .. Post in the sealed envelope .. In the sealed envelope, with the help of courier .. In open manner (without a sealed envelope) with the help of courier .. By phone .. Other _____ </td> </tr> </table>	<p>VCT unit</p> <ul style="list-style-type: none"> .. By the form # 2.2 of notification of laboratory confirmation result <input type="checkbox"/> .. Other _____ 	<ul style="list-style-type: none"> .. Post in the sealed envelope .. In the sealed envelope, with the help of courier .. In open manner (without a sealed envelope) with the help of courier .. By phone .. Other _____
<p>VCT unit</p> <ul style="list-style-type: none"> .. By the form # 2.2 of notification of laboratory confirmation result <input type="checkbox"/> .. Other _____ 	<ul style="list-style-type: none"> .. Post in the sealed envelope .. In the sealed envelope, with the help of courier .. In open manner (without a sealed envelope) with the help of courier .. By phone .. Other _____ 		
d.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%; padding: 5px;"> <p>Antenatal clinics</p> <ul style="list-style-type: none"> .. Other _____ </td> <td style="width: 40%; padding: 5px;"> <ul style="list-style-type: none"> .. Post in the sealed envelope .. In the sealed envelope, with the help of courier .. In open manner (without a sealed envelope) with the help of courier .. By phone .. Other _____ </td> </tr> </table>	<p>Antenatal clinics</p> <ul style="list-style-type: none"> .. Other _____ 	<ul style="list-style-type: none"> .. Post in the sealed envelope .. In the sealed envelope, with the help of courier .. In open manner (without a sealed envelope) with the help of courier .. By phone .. Other _____
<p>Antenatal clinics</p> <ul style="list-style-type: none"> .. Other _____ 	<ul style="list-style-type: none"> .. Post in the sealed envelope .. In the sealed envelope, with the help of courier .. In open manner (without a sealed envelope) with the help of courier .. By phone .. Other _____ 		
e.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%; padding: 5px;"> <p>Other referring facilities</p> <ul style="list-style-type: none"> .. Other _____ </td> <td style="width: 40%; padding: 5px;"> <ul style="list-style-type: none"> .. Post in the sealed envelope .. In the sealed envelope, with the help of courier .. In open manner (without a sealed envelope) with the help of courier .. By phone .. Other _____ </td> </tr> </table>	<p>Other referring facilities</p> <ul style="list-style-type: none"> .. Other _____ 	<ul style="list-style-type: none"> .. Post in the sealed envelope .. In the sealed envelope, with the help of courier .. In open manner (without a sealed envelope) with the help of courier .. By phone .. Other _____
<p>Other referring facilities</p> <ul style="list-style-type: none"> .. Other _____ 	<ul style="list-style-type: none"> .. Post in the sealed envelope .. In the sealed envelope, with the help of courier .. In open manner (without a sealed envelope) with the help of courier .. By phone .. Other _____ 		
12.	<p>What is the timeframe of reporting to NCDC with the forms # 2.2 and 4.2?</p> <ul style="list-style-type: none"> .. 2 to 3 weeks after arrival of the primary sample .. 3 to 4 weeks after arrival of the primary sample .. more than 4 weeks after arrival of the primary sample 		
13.	<p>If reporting is delayed, what is the reason?</p>		

14.	<p>Where do you usually keep the registration journal?</p> <ul style="list-style-type: none">.. In the room (office) which is being locked, or in the locked cabinet □.. In the room.. Other. <i>Please clarify:</i>
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Annex 5: Review of records/quest. instrument for antenatal clinics (3)

Interviewer: _____ Questionnaire # 3_

Region _____ Facility _____

Interview has to be held with the laboratory worker of antenatal clinic or the person who has worked according to suggested methodology during entire pilot.

1. The question intended for the interviewer is marked accordingly. This question is intended for you, do not ask the respondent.
2. Do not read out possible answers. If complete answer can not be obtained, then try to clarify.

I.	GUIDELINES, PROCEDURES
1.	What is your position? .. Physician, gynecologist .. Laboratory physician .. Laboratory technician .. Nurse .. Other
2.	Have you had training on HIV surveillance? .. Yes .. No
3.	Do you have guidelines on HIV surveillance? .. Yes <i>Ask the respondent to show you the guidelines. The document could be observed:</i> .. Yes .. No .. No
4.	Are instructions given in the guidelines easy to understand? .. Yes .. No .. Partially
5.	Do you know your facility's code? .. Yes .. No
6.	Where does taking of blood samples of the pregnant women take place? (<i>More than one answer is possible</i>) .. In gynecologist's office, by the nurse (laboratory technician) <input type="checkbox"/> .. In the specially designated room .. The pregnant women are being sent to the laboratory .. Other _____
7.	If the pregnant woman agrees to be tested for HIV infection, hepatitis B and C and syphilis, do you distribute blood samples into two tubes? .. Yes, always. <i>Go to question 10</i> .. Sometimes .. No
8.	Why don't you distribute blood samples into two tubes? .. Lack of tubes .. Other. <i>Specify:</i>
9.	When you don't distribute blood samples into two tubes, do you encounter problems with testing? .. Yes. <i>Clarify:</i> .. No
10.	Who assigns test numbers? (<i>More than one answer is possible</i>) .. Receptionist .. The personnel, who draws blood samples .. The personnel, who performs testing (analysis)

	<ul style="list-style-type: none"> .. Other
11.	<p>During the testing for HIV infection, do you complete the form # 1.1, accompanying the sample?</p> <ul style="list-style-type: none"> .. Yes .. No. Explain:
12.	<p><i>[Skip this question, if the respondent is laboratory worker]</i> Does your laboratory inform you about HIV primary testing result? ?</p> <ul style="list-style-type: none"> .. Yes. Explain, why this is needed: .. No
13.	<p>Does the laboratory keep its own registration journal?</p> <ul style="list-style-type: none"> .. Yes, similar to the journal #1c .. Yes, different from the journal #1c .. No .. I don't know
14.	<p>Does the confirmatory laboratory inform you about the final test result? □</p> <ul style="list-style-type: none"> .. Yes, always in case of positive result .. Sometimes .. No. Go to question 17
15.	<p>How does the confirmatory laboratory inform you about the final test result? □□</p> <ul style="list-style-type: none"> .. By phone. .. Other _____
16.	<p>Do you report using form #3 (reporting form for syphilis, hepatitis B and C laboratory test results)?</p> <ul style="list-style-type: none"> .. Yes .. No. Explain, why: <i>go to question 21.</i>
17.	<p>Do you send the first part and the second part of the form # 3 separately, in separate envelopes?</p> <ul style="list-style-type: none"> .. Yes .. No. Explain, why:
18.	<p>In what form do you report with the form # 3?</p> <ul style="list-style-type: none"> .. Form # 3 is being posted in a sealed envelope .. Form # 3 is being sent with the courier in a sealed envelope .. Form # 3 is being sent with the courier in open manner, without a sealed envelope .. Other _____
19.	<p>What is the timeframe of reporting with form # 3?</p> <ul style="list-style-type: none"> .. Till 7th of each month .. After 7th of each month. Explain the reason:
20.	<p>Do you encounter problems during reporting with the forms?</p> <ul style="list-style-type: none"> .. Yes. <i>Specify the problems:</i> .. No
II.	<p>Use of registration journal (# 1c)</p>
21.	<p>Do you use journal # 1c for data registration?</p> <p><i>Match the answers with corresponding scores:</i></p> <ul style="list-style-type: none"> .. 1 – No, I have not used it; .. 2 – I use only several columns; .. 3 – I use nearly all columns; .. 4 – I use all columns. <p>If the answer is 1, 2, or 3, explain why? (Don't read out the options, match the respondents answer with below listed answers; more than one answer is possible)</p> <ul style="list-style-type: none"> .. I don't get paid for this work .. I don't have enough time to fill in the journal □ .. The journal does not respond to my needs, I need to enter different kind of information. <p>Specify:</p> <ul style="list-style-type: none"> .. Other:
	<p>Ask the respondent to show you the registration journal # 1c</p>

		Test number (1)	Name (2)	Address (3)	Date of birth (4)	Sex (5)	Date of admission (6)
22.	<i>[To the interviewer]:</i> Is the column completed?	Yes No	Yes No	Yes No	Yes No	Yes No	Yes No
23.	<i>[To the respondent]:</i> Would you change anything in this column?	Yes No If yes, specify	Yes No If yes, specify	Yes No If yes, specify	Yes No If yes, specify	Yes No If yes, specify	Yes No If yes, specify
		Date of sample taking (7)	Syphilis (8)	Hepatitis B (9)	Hepatitis C (10)	Date of reporting (11)	
24.	<i>[To the interviewer]:</i> Is the column completed?	Yes No	Yes No	Yes No	Yes No	Yes No	
25.	<i>[To the respondent]:</i> Would you change anything in this column?	Yes No If yes, specify	Yes No If yes, specify	Yes No If yes, specify	Yes No If yes, specify	Yes No If yes, specify	
26.	<i>[To the interviewer]:</i> Are the results of HIV testing of pregnant women indicated anywhere in the journal? Yes No						
27.	<i>[To the interviewer].</i> The registration journal is stored: In the room (office), accessible for others <input type="checkbox"/> In the room, not accessible for others (the room is being locked, the cabinet is being locked). Other. Explain:						

28.	<p>Would you add anything to the journal?</p> <p>.. Yes. Please specify:</p> <p>.. No</p>
29.	<p>Where do you usually keep the registration journal?</p> <p>.. In the room, which is being locked, or in the locked cabinet</p> <p>.. In the room</p> <p>.. Other. <i>Explain:</i></p>
30.	<p>Is there a designated person in the facility, which is responsible for data safety?</p> <p>.. Yes .. No .. I don't know</p>
31.	<p>Does the facility have a document on data safety and confidentiality requirements/procedures? <input type="checkbox"/></p> <p>.. Yes. <i>Ask the respondent, to show you the document. The document could be observed:</i> .. Yes .. No</p> <p>.. No .. I don't know</p>
32.	<p>Do you have any other remarks/wishes?</p>

Annex 6: Review of records/quest. instrument for blood transfusion stations (7)

Interviewer: _____ Questionnaire # 7_

Region _____ Facility _____

Interview has to be held with the person, who has been working (was supposed to work) with suggested methodology during entire pilot.

1. The question intended for the interviewer is marked accordingly. This question is intended for you, do not ask the respondent.
2. Do not read out possible answers. If complete answer can not be received, then try to clarify.

I.	GUIDELINES, PROCEDURES
1.	What is your position? .. Physician (laboratory physician) .. Nurse .. Other
2.	Have you had training on HIV surveillance? .. Yes .. No
3.	Do you have HIV surveillance guidelines? .. Yes <i>Ask the respondent, to show you the guidelines. The document could be observed on site:</i> .. Yes .. No .. No
4.	Are instructions, given in the guidelines easy to understand? .. Yes .. No .. Partially
5.	Do you know the code of your facility? .. Yes .. No
6.	Who assigns test numbers? .. Receptionist .. The person, who performs taking of blood samples .. Other
7.	During HIV testing, do you complete the form # 2.1, accompanying the laboratory confirmation sample?? .. Yes .. No. explain the reason:
8.	Do you report using form # 3 (reporting form for the results of syphilis, hepatitis B and C testing)? .. Yes .. No. Explain, why: <i>Go to question 15.</i>
9.	Do you send the first part and the second part of the form # 3 separately, in separate envelopes? .. Yes .. No. Explain, why:
10.	How do you report with form # 3? .. Form # 3 is being posted in a sealed envelope .. Form # 3 is being sent with the courier in a sealed envelope .. Form # 3 is being sent with the courier without a sealed envelope .. Other _____
11.	What is a timeframe for reporting with form # 3? .. Till 7 th of each month .. After 7 th of each month. Explain the reason:
12.	Do you encounter problems while reporting with the forms? .. Yes. Specify the problems:

	<ul style="list-style-type: none"> .. No
13.	<p>Do enter the data in the database?</p> <ul style="list-style-type: none"> .. Yes .. No. Explain:
III.	<p>Use of registration journal (#1c)</p> <p>Do you use journal # 1c for data registration? <i>Match the answers with corresponding scores:</i></p> <ul style="list-style-type: none"> .. 1 – No, I have not used it; .. 2 – I use only several columns; .. 3 – I use nearly all columns; .. 4 – I use all columns. <p>If the answer is 1, 2, or 3, explain why? (Don't read out the options, match the respondents answer with below listed answers; more than one answer is possible)</p> <ul style="list-style-type: none"> .. I don't get paid for this work .. I don't have enough time to fill in the journal ☐ .. The journal does not respond to my needs, I need to enter different kind of information. <p><i>Specify:</i></p> <ul style="list-style-type: none"> .. Other:
	<p><i>Ask the respondent, to show you the registration journal. If the journal #1c is not being used, go to question 21.</i></p>

		Test number (1)	Name (2)	Address (3)	Date of birth (4)	Sex (5)	Date of admission (6)
14.	<i>[To the interviewer]:</i> Is the column completed?	“ Yes ” No	“ Yes ” No	“ Yes ” No	“ Yes ” No	“ Yes ” No	“ Yes ” No
15.	<i>[To the respondent]:</i> Would you change anything in this column?	“ Yes ” No If yes, specify	“ Yes ” No If yes, specify	“ Yes ” No If yes, specify	“ Yes ” No If yes, specify	“ Yes ” No If yes, specify	“ Yes ” No If yes, specify
		Date of sample taking (7)	Syphilis (8)	Hepatitis B (9)	Hepatitis C (10)	Date of reporting (11)	
16.	<i>[To the interviewer]:</i> Is the column completed?	“ Yes ” No	“ Yes ” No	“ Yes ” No	“ Yes ” No	“ Yes ” No	
17.	<i>[To the respondent]:</i> Would you change anything in this column?	“ Yes ” No If yes, specify	“ Yes ” No If yes, specify	“ Yes ” No If yes, specify	“ Yes ” No If yes, specify	“ Yes ” No If yes, specify	

18.	<i>[To the interviewer]. Are the following fields present in the journal and are they completed? [Mark the appropriate box, if the field is completed at least once]</i>	
19.	Field is present .. Code .. Name .. Telephone .. District .. Risk group .. Primary test result .. Confirmatory test result <input type="checkbox"/> .. Other identification signs <input type="checkbox"/>	Field is present .. Code .. Name .. Telephone .. District .. Risk group .. Primary test result .. Confirmatory test result <input type="checkbox"/> .. Other identification signs <input type="checkbox"/>
20.	<i>[To the interviewer]. Registration journal is stored:</i> .. In the room (office), accessible for others <input type="checkbox"/> .. In the room, not accessible for others (the room is being locked, the cabinet is being locked) .. Other. <i>Clarify:</i>	
21.	Where do you usually keep registration journal? .. In the room, which is being locked, or in the locked cabinet. .. In the room .. Other. <i>Please, explain:</i>	

22.	Is there a designated person in the facility, which is responsible for data safety? .. Yes .. No .. I don't know
23.	Does the facility have a document on data safety and confidentiality requirements/procedures? <input type="checkbox"/> .. Yes. <i>Ask the respondent, to show you the document. The document could be observed:</i> .. Yes .. No .. No .. I don't know
24.	Do you have any other remarks/wishes?

Annex 7: Instrument for sentinel sites (8)

Interviewer: _____ Questionnaire # **8**_

Region _____ Facility _____

Interview has to be held with the person responsible for sentinel surveillance.

3. The question intended for the interviewer is marked accordingly. This question is intended for you, do not ask the respondent.
4. Do not read out possible answers. If complete answer can not be obtained, then try to clarify.

I.	GUIDELINES, PROCEDURES
1.	What is your position? .. Physician .. Laboratory physician .. Laboratory technician .. Nurse .. Other
2.	Have you had training on HIV surveillance? .. Yes .. No
3.	Do you have guidelines on HIV surveillance? .. Yes <i>Ask the respondent to show you the guidelines. The document could be observed:</i> .. Yes .. No .. No
4.	Are instructions given in the guidelines easy to understand? .. Yes .. No .. Partially
5.	Dou you know your facility's code? .. Yes .. No
6.	Where does taking of blood samples of the pregnant women take place? (<i>More than one answer is possible</i>) .. In gynecologist's office, by the nurse (laboratory technician) <input type="checkbox"/> .. In the specially designated room .. The pregnant women are being sent to the laboratory .. Other _____
7.	Do you collect blood samples in two tubes? .. Yes, always. <i>Go to question 9</i> .. Sometimes .. No
8.	Why don't you collect blood samples in two tubes? .. Lack of tubes .. Other reason. Specify:
9.	When you collect blood samples in two tubes, how do you deliver them to the laboratory? .. Both at the same time .. STI sample immediately, HIV sample at the end of the day .. Other. Specify:
10.	Who assigns test numbers? (<i>More than one answer is possible</i>) .. The person responsible for sentinel surveillance .. The person who performs blood taking

	<ul style="list-style-type: none"> .. The person who performs testing .. Other
11.	<p><i>[If the respondent is laboratory worker, skip this question]</i> Does your laboratory inform you about the HIV primary test result?</p> <ul style="list-style-type: none"> .. Yes. Explain the need: .. No
12.	<p>Does the laboratory keep its own registration journal?</p> <ul style="list-style-type: none"> .. Yes, similar to # 2a .. Yes, different from # 2a .. No .. I don't know
13.	<p>Do you receive final test result from the confirmatory laboratory? <input type="checkbox"/> <input type="checkbox"/></p> <ul style="list-style-type: none"> .. Yes, always in case of positive result .. Sometimes .. No. Go to question 15.
14.	<p>How does the confirmatory laboratory inform you about the final test result? <input type="checkbox"/> <input type="checkbox"/></p> <ul style="list-style-type: none"> .. By phone .. Other _____
15.	<p>Do you report with form # 4?</p> <ul style="list-style-type: none"> .. Yes .. No. Explain the reason: <i>go to question 19.</i>
16.	<p>How do you report with form # 4?</p> <ul style="list-style-type: none"> .. Form # 4 is being posted in a sealed envelope .. Form # 4 is being sent with the courier in a sealed envelope .. Form # 4 is sent with the courier without a sealed envelope .. Other _____
17.	<p>What is a timeframe of reporting with form # 4?</p> <ul style="list-style-type: none"> .. Till 7th of each month .. After 7th of each month. Explain the reason:
18.	<p>Do you encounter problems while reporting with forms?</p> <ul style="list-style-type: none"> .. Yes. Specify the problems: .. No
19.	<p>Where do you usually keep form # 4?</p> <ul style="list-style-type: none"> .. In the room, which can be locked, or in the locked cabinet .. In the room .. Other. <i>Specify:</i>
20.	<p>Is there a designated person in the facility, responsible for data safety?</p> <ul style="list-style-type: none"> .. Yes .. No .. I don't know
21.	<p>Does the facility have a document on data safety and confidentiality requirements/procedures? <input type="checkbox"/></p> <ul style="list-style-type: none"> .. Yes. <i>Ask the respondent, to show you the document. The document could be observed:</i> <input type="checkbox"/> Yes <input type="checkbox"/> No .. No .. I don't know
22.	<p>Do you have any other remarks/wishes?</p>

Annex 8: Instrument for sentinel sites (9)

Laboratory worker:

Interviewer: _____ Questionnaire # 9_

Region _____ Facility _____

Interview has to be held with the technician or physician in the laboratory, where STI patients are undergoing primary testing for HIV infection.

1. The question intended for the interviewer is marked accordingly. This question is intended for you, do not ask the respondent.
2. Do not read out possible answers. If complete answer can not be obtained, then try to clarify.

I.	GUIDELINES, PROCEDURES
1.	<p>Do you have instructions on blood taking, storage and transportation? .. Yes <i>Ask the respondent to show you the instructions. The document could be observed:</i> .. Yes .. No .. No</p>
2.	<p>If patient visits for testing for STIs, do you ask him/her the name? .. Yes .. No .. There are no patients</p>
3.	<p>Is the sample, brought for HIV testing accompanied by the test number? .. Yes .. No .. There are no samples brought</p>
4.	<p>Do you inform the physician about HIV primary testing result? .. Yes, always .. Yes, sometimes .. No</p>
5.	<p>Do you encounter problems with transportation of blood samples? .. Yes. Specify: .. No</p>
6.	<p>Do you receive information from the confirmatory laboratory about the results of final testing? .. Yes, always in case of positive result .. Sometimes .. No. <i>Go to question 8</i></p>
7.	<p>How does the confirmatory laboratory inform you about the results of final testing? .. By phone .. Other _____</p>
II.	Use of registration journal # 2a
8.	<p>Do you use journal # 2a for data registration? <i>Match the answers with corresponding scores:</i> .. 1- No, I have not used it; .. 2- I use only several columns .. 3 – I use nearly all columns; .. 4 – I use all columns <i>If the answer is 1,2 or 3, explain why (Don't read out the options; match the respondent's</i></p>

	<i>answer with the answers listed below; more than one answer is possible)</i>	
	<ul style="list-style-type: none"> .. I don't get paid for this work .. I don't have enough time for completing this journal .. The journal does not respond to my needs, I need to enter different information. Specify: .. Other: 	
	<i>Ask the respondent, to show you the registration journal # 2a</i>	
9.	<i>[To the interviewer]: The fields not [</i> <i>completed</i> <ul style="list-style-type: none"> .. Test number .. Rapid test .. Date of the rapid test .. Date of the rapid test (?) .. Date of sending for confirmation ☐ .. Confirmatory laboratory ☐ 	<i>[To the respondent]: Which field would you [</i> <i>change?</i> <ul style="list-style-type: none"> .. Test number .. Rapid test .. Date of the rapid test .. Date of the rapid test (?) .. Date of sending for confirmation ☐ .. Confirmatory laboratory ☐ <i>Explain:</i>
10.	<i>[To the interviewer]. Registration journal is stored:</i> <ul style="list-style-type: none"> .. In the room, accessible for others .. In the room, in the locked cabinet .. Other. <i>Clarify:</i> 	
11.	<i>Where do you usually keep the registration journal?</i> <ul style="list-style-type: none"> .. In the room .. In the room, in the locked cabinet .. Other. <i>Clarify:</i> 	

Annex 9: Methodical guidelines on focus discussions for antenatal clinics

Introduction

My name is XXXXX.

You are participating in an assessment carried out by the Curatio International Foundation in the frames of HIV/AIDS surveillance system strengthening program, funded by the Global Fund. In 2008, within the frames of this project the national experts with technical support from Curatio International Foundation developed a new design of HIV/AIDS surveillance system, national guidelines on HIV/AIDS surveillance, new registration, notification and reporting forms and journals, standard operational procedures. The pilot of the new design of the system will take place in January-June 2009, in Tbilisi and Adjara region. The purpose of this research is to assess the pilot and reveal any gaps and limitations of the new design of the system. Today, I would like to have a 30-minute talk with you about your opinion regarding the new system of HIV/AIDS surveillance, new reporting/registration forms and journals, standard operational procedures, about the factors hindering proper operation of the system and your suggestions – what needs to be improved in this direction.

Let me remind to you the procedures of participation in the focus group discussions, and the fact that your participation in this study is voluntary. The information shared in this discussion is entirely confidential and must not be spread outside the group. Thus, the confidentiality of your views will be kept if all participants will comply with this rule.

You have a right to refuse to answer any undesirable question during the discussion, or to terminate your participation in this study at any moment. However, the information provided by you before you terminate your participation will be used for the purposes of the study because of the interactive nature of group discussion.

For the purposes of the study, discussion will be audio taped. To preserve confidentiality, audio transcripts will be prepared during 6 months and thereafter the audio tape will be destroyed. Your name and other personal information will be removed from the transcript. The results of this study may be used for the publications, but those will be presented without identification of participants' names.

Is there anybody against the audio taping of the group? (If anybody is against, make manual records)

I have several specific questions, which I will use during this discussion. First, I would like to talk about you. [Moderator asks participants to introduce themselves: name, profession and address].

1. First of all, let us discuss how difficult it is for you to accomplish the functions, assigned to you within the frames of reformed HIV/AIDS surveillance system?

2. What problems do you encounter in regards with compliance with procedures given in the guidelines?
3. In your facility, why does not receive a pregnant woman the test number from the receptionist, so that she could go to the gynecologist with test number already assigned?
4. What are the hindering factors for the proper procedure: the blood sample from a pregnant woman is taken by the nurse in the gynecologist's room and sent to the lab for testing?
5. What are the hindering factors for the proper procedure: blood is distributed into two separate tubes and sent to the lab for HIV-testing with a test number?
6. To what extent is patients' confidentiality preserved in your facility? □
7. How difficult is it for you to fill in the reporting form# 3? □ □
8. Do you encounter any problems in regards with reporting procedure? Why are not you sending the forms by the end of the month? What is the reason for that?
9. Now, let us discuss, to what extent are you using the guidelines and how clearly are the standard procedures explained? Do you think that this supporting guideline is too overloaded and it would be more practical for you to have recommendations related only to your work?

Motivations

10. Now, let us discuss to what extent are you motivated to carry out the function assigned to you? What is the main source of your motivation for better performance of the key functions of HIV/AIDS surveillance?

Ask about the following factors:

- *Job responsibility*
- *Acknowledgement of the significance of the HIV/AIDS problem □*
- *Participation in the modern information system*
- *Possibility of improving knowledge and skills*
- *Money/salary*

Recommendations

11. Now, please give your recommendations on what is needed to be done in order to increase your motivation for better performance of functions of the HIV/AIDS surveillance system.

Please categorize recommendations into two groups:

- *Improvement of knowledge and skills*
 - i. *Trainings*

- ii. Supportive supervision (on-site training and technical assistance)*
- *Increase of motivation*
 - i. Professional motivation*
 - ii. Financial motivation*
 - iii. Evaluation of the performed work*

12. What are your recommendations regarding the forms?

13. What are your recommendations regarding the registration journals?

14. What are your recommendations regarding the guidelines?

15. What are your recommendations regarding the standard operation procedures?

Thank you for providing useful information!

Annex 10: Methodical guidelines on focus discussions for VCT professionals

Introduction

My name is XXXXX.

You are participating in an assessment carried out by the Curatio International Foundation in the frames of HIV/AIDS surveillance system strengthening program, funded by the Global Fund. In 2008, within the frames of this project the national experts with technical support from International Foundation Curatio developed a new design of HIV/AIDS surveillance system, national guidelines on HIV/AIDS surveillance, new registration, notification and reporting forms and journals, standard operational procedures. The pilot of the new design of the system will take place in January-June 2009, in Tbilisi and Adjara region. The purpose of this research is to assess the pilot and reveal any gaps and limitations of the new design of the system. Today, I would like to have a 30-minute talk with you about your opinion regarding the new system of HIV/AIDS surveillance, new reporting/registration forms and journals, standard operational procedures, about the factors hindering proper operation of the system and your suggestions – what needs to be improved in this direction.

Let me remind to you the procedures for participation in the focus group discussions, and the fact that your participation in this study is voluntary. The information shared in this discussion is entirely confidential and must not be spread outside the group. Thus, the confidentiality of your views will be kept if all participants will comply with this rule.

You have a right to refuse to answer any undesirable question during the discussion, or to terminate your participation in this study at any moment. However, the information provided by you before you terminate your participation will be used for the purposes of the study because of the interactive nature of group discussion.

For the purposes of the study, discussion will be audio taped. To preserve confidentiality, audio transcripts will be prepared during 6 months and thereafter the audio tape will be destroyed. Your name and other personal information will be removed from the transcript. The results of this study may be used for the publications, but those will be presented without identification of participants' names.

Is there anybody against the audio taping of the group? (If anybody is against, make manual records)

I have several specific questions, which I will use during this discussion. First, I would like to talk about you. [Moderator asks participants to introduce themselves: name, profession and address].

First of all, let us discuss how difficult it is for you to accomplish the functions, assigned to you within the frames of reformed HIV/AIDS surveillance system?

Ask to verify that respondents speak about the functions of their facility and their own functions as VCT specialists (voluntary pre- and post-test counseling, entering data into the registration journal, filling in form # 1 and reporting to NDC)

When speaking about their functions, ask how important is for them implementing these functions on the level of their facilities, considering the existing HIV/AIDS epidemiological situation in the country.

Now, let us talk about what gaps/problems exist in your opinion in implementing mentioned functions of HIV/AIDS surveillance? What are the reasons for this?

Voluntary counseling

1. How difficult or easy is performing the pre- and post-counseling for you?
2. How easy is it for you to assign unique codes to the patients (do you encounter problems in this regard? Do patients find it difficult to answer your questions? Are there cases, when patients refuse to answer your questions?)
3. How understandable are for you the variables, indicated in the reporting form? Is it difficult for you to define the patient's riskgroup, the rate of infection or the hetero subcategory? If you have problems, please specify what in particular is difficult for you?

Case registration

4. How easy the case registration design and procedures are for you: do you use registration journal? Is it comprehensive? Do you think that you need to collect other information that is not implied by this journal?
5. Do you need to keep this journal at all? Do you think it is an additional workload to you that is not helpful at all?

Reporting

6. How easy is the reporting form # 1 for you?
7. Do you encounter any problems while completing the form # 1?
8. How simple are the reporting procedures for you (sending reports to NDCPH in a sealed envelope by the end of the month)? Do you encounter problems in this regard? Please list these problems.

Methodical recommendations

9. Now let us talk about to what extent are you using the guidelines and how clearly are the standard procedures explained?

10. Do you think that this supporting guideline is too complicated and it would be more practical for you to have recommendations related only to your work?

Motivations

11. Now, let us talk about to what extent are you motivated to carry out the function assigned to you? What is the main source of your motivation for better performance of the key functions of HIV/AIDS surveillance?

Ask about following factors:

- *Job responsibility*
- *Acknowledgement of the significance of the HIV/AIDS problem*
- *Participation in the modern information system*
- *Possibility of improving knowledge and skills*
- *Money/salary*

Recommendations

12. Now, please give your recommendations on what has to be done in order to increase your motivation for better performance of functions of the HIV/AIDS surveillance system.

Please categorize recommendations into two groups:

- *Improvement of knowledge and skills*
 - i. Trainings*
 - ii. Supportive supervision (on-site training and technical assistance)*
- *Increase of motivation*
 - i. Professional motivation*
 - ii. Financial motivation*
 - iii. Evaluation of the performed work*

13. What are your recommendations regarding the forms?

14. What are your recommendations regarding the registration journals?

15. What are your recommendations regarding the guidelines?

16. What are your recommendations regarding the standard operation procedures?

Thank you for providing useful information!

Annex 11: Methodical guidelines on focus discussions for blood transfusion stations

Introduction

My name is XXXXX.

You are participating in an assessment carried out by the Curatio International Foundation in the frames of HIV/AIDS surveillance system strengthening program, funded by the Global Fund. In 2008, within the frames of this project the national experts with technical support from Curatio International Foundation developed a new design of HIV/AIDS surveillance system, national guidelines on HIV/AIDS surveillance, new registration, notification and reporting forms and journals, standard operational procedures. The pilot of the new design of the system will take place in January-June 2009, in Tbilisi and Adjara region. The purpose of this research is to assess the pilot and reveal any gaps and limitations of the new design of the system. Today, I would like to have a 30-minute talk with you about your opinion regarding the new system of HIV/AIDS surveillance, new reporting/registration forms and journals, standard operational procedures, about the factors hindering proper operation of the system and your suggestions – what needs to be improved in this direction.

Let me remind to you the procedures for participation in the focus group discussions and the fact, that your participation in this study is voluntary. The information shared in this discussion is entirely confidential and must not be spread outside the group. Thus, the confidentiality of your views will be kept if all participants will comply with this rule.

You have a right to refuse to answer any undesirable question during the discussion, or to terminate your participation in this study at any moment. However, the information provided by you before you terminate your participation will be used for the purposes of the study because of the interactive nature of group discussion.

For the purposes of the study, discussion will be audio taped. To preserve confidentiality, audio transcripts will be prepared during 6 months and thereafter the audio tape will be destroyed. Your name and other personal information will be removed from the transcript. The results of this study may be used for the publications, but those will be presented without identification of participants' names.

Is there anybody against the audio taping of the group? (If anybody is against, make manual records)

I have several specific questions, which I will use during this discussion. First, I would like to talk about you. [Moderator than asks participants to introduce themselves: name, profession and address].

1. First of all, let us discuss how difficult it is for you to accomplish the functions, assigned to you within the frames of renewed HIV/AIDS surveillance system?

2. What problems do you encounter in regards with compliance with the guideline procedures? What prevents you from completing the registration forms and reporting forms? And what problems do you encounter in regards with reporting procedure?
3. To what extent is the patient confidentiality preserved in your facility? □
4. Now let us talk about to what extent are you using the guidelines and how clearly are the standard procedures explained? Do you think that this supporting guideline is too complicated and it would be more practical for you to have recommendations related only to your work?
5. To what extent do you use the electronic database, created for donors? How well does this database cover all blood transfusion stations, where the donors are tested within the frames of the state program?

Motivations

1. Now, let us talk about to what extent are you motivated to carry out the function assigned to you? What is the main source of your motivation for better performance of the key functions of HIV/AIDS surveillance?

Ask about following factors:

- *Job responsibility*
- *Acknowledgement of the significance of the HIV/AIDS problem* □
- *Participation in the modern information system*
- *Possibility of improving knowledge and skills*
- *Money/salary*

Recommendations

1. Now, please provide your recommendations on what has to be done, in order to increase your motivation for better performance of functions of the HIV/AIDS surveillance system.

Please categorize recommendations into two groups:

- *Improvement of knowledge and skills*
 - i. Trainings*
 - ii. Supportive supervision (on-site training and technical assistance)*
- *Increase of motivation*
 - i. Professional motivation*
 - ii. Financial motivation*
 - iii. Evaluation of the performed work*

6. What are your recommendations regarding the forms?

- 7. What are your recommendations regarding the registration journals?**
- 8. What are your recommendations regarding the guidelines?**
- 9. What are your recommendations regarding the standard operation procedures?**

Thank you for providing useful information!

Annex 12: Quantitative data (tables)

Table 10: General information on VCT units

	Total
Interviewed VCT specialists	17
VCT specialists, interviewed at worksite	14
VCT units	9
Facilities with a laboratory, where primary testing is being performed	4
Laboratory of VCT unit	3
Confirmatory laboratory	1

Table 11: Observation of standard procedures of HIV/AIDS surveillance in VCT units

	Number	Total
VCT specialists have undergone training	17	17
Guidelines were seen on site	13	14
Knowledge of personal/facility's code	17	17
Completing the form #1 on the first stage	16	17
Difficulties with variables of the form #1		
Unique code	6	17
It is difficult to obtain the information	5	6
Problems with confidentiality	1	6
Previous test result (information is subjective, it is difficult to judge, if confirmatory or rapid test was used)	3	17
Sending the patient to the laboratory for blood taking procedure	1	9
Using form # 1.1, accompanying the sample	8	9
Getting information about primary test result		
By means of the form #1.2	8	9
Verbally	3	9
By means of the internal form	1	9
Getting information about confirmatory test result		
VCT specialist is being informed by the confirmatory laboratory	6	9
National Tuberculosis Center is being informed by the confirmatory laboratory	1	9
There have been no cases of confirmatory testing	2	9
Types of notification about confirmatory test results		
By means of the form #2.2	3	9
By phone	5	9
Personally	3	9
There have been no cases of confirmatory testing	2	9
Timeframe of notification about confirmatory test results		
One week	1	9
Two weeks	3	9
There have been no cases of confirmatory testing	2	9
Informing patients about the test results during post-test counseling	9	9

Timeframe of informing the patients about test results		
One week	1	9
Two weeks	6	9
Three weeks	1	9
One hour (result of primary test)	1	9

Table 12: Use of registration/reporting forms in VCT units

	Number	Total
Journal #1a is being used	10	17
Journal # 1a could be observed on site	9	10
Change/simplification of the variables was recommended [
Unique Code	4	10
District	1	10
Country of birth	2	10
Citizenship	2	10
Date of birth	4	10
Sex	2	10
Risk group	1	10
Removal of the variables was recommended		
District	2	10
Country of birth	1	10
Citizenship	1	10
Previous test result	2	10
Primary test result	2	10
Confirmatory test result [1	10
Results of tests on syphilis, hepatitis B and C	1	10
Addition of the variables was recommended		
Date of taking material for examination	2	10
Date of registration	4	10
Numbering	1	10
Reporting with form #1		
By post	0	9
In a sealed envelope, with the help of courier	4	9
In open manner(without a sealed envelope)	5	9
Reporting with the form # 1 before 25 th of each month	9	9

Table 13: Testing procedures in VCT units

	Number	Total
Availability of blood taking/storage/transportation instructions in the laboratory	2	4
Document could be observed on site	2	2
Taking blood samples form the patients in the laboratory room	1	4
Receiving confirmatory test results in the laboratory of VCT [unit		
Laboratory personnel does not receive confirmatory test results [2	3
There have been no cases of confirmatory testing [1	3
Form # 2.1, accompanying laboratory confirmation sample [

Form # 2.1 is being used	2	3
There have been no samples sent for confirmation	1	3
Use of non-standard journals	4	4
Non-standard journal could be observed	3	4
Patients' names are indicated	1	4
Primary test results are indicated	2	4
Confirmatory test results are indicated	1	4

Table 14: Anonymity/confidentiality in VCT units

	Number	Total
Journal #1a		
Patients' names are not included	9	10
The journal is kept in VCT room, which is being locked, in a locked cabinet	7	10
The journal is kept in another room	1	10
Non-standard journal		
The journal is kept in the room, is not accessible for others	4	4
There is a designated person, responsible for data safety in the facility	6	9
The document on data safety and confidentiality procedures is available in the facility	4	9
The document could be observed	1	4

Table 15: General information about antenatal clinics

	Total
Total number of specialists, interviewed in antenatal clinics	13
Laboratory physicians	11
Nurses	2
Number of antenatal clinics	13
Number of facilities with on-site laboratory, where the primary testing is performed	13

Table 16: Standard procedures of HIV/AIDS surveillance in antenatal clinics

	Number	Total
Specialists have undergone training	13	13
Guidelines could be observed on site	9	13
Instructions, given in the guidelines are easy to understand	9	13
Knowledge of the code of facility	11	13
Site of taking of blood samples from the pregnant women	13	13
Laboratory	9	13
Procedure room	5	13
Simple code is being assigned by:		
Laboratory physician, who performs testing	12	13
Receptionist	1	13
Distribution of blood samples into two tubes	0	13
Reasons of failing to distribute blood into two tubes:		
Lack of tubes	6	13
Lack of necessity	7	13

Complicated procedure	2	13
Use of the form # 1.1, accompanying the sample	3	13
Reasons of failing to use the form # 1.1, accompanying the sample		
Existence of the internal form (medical card #, demographic data, telephone, name, tests to be conducted)	1	10
Absence of need (nurse and laboratory worker work together)	8	10
The purpose of the form is not clear	1	10
Receiving primary test results (by those specialists, who do not perform testing themselves)	2	2
Informing gynecologists about HIV primary testing results	7	13
Number of positive results of primary testing among pregnant women during past 6 months	0	13
Use of the form #2.1, accompanying laboratory confirmation sample	0	
Receiving results of confirmation from the confirmatory laboratory	0	
Availability of blood taking/storage/transportation instructions in the laboratory	7	13
The document could be observed on site	5	7

Table 17: Use of registration/reporting forms in antenatal clinics

	Number	Total
Journal #1c is being used	13	13
Journal # 1c could be observed on site	13	13
Completion of all variables in journal #1c	13	13
Change/simplification of the variables is recommended		
Test number (more space)	1	13
Name (more space)	1	13
Date of birth	3	13
Syphilis	1	13
Hepatitis B	1	13
Hepatitis C	1	13
Date of reporting (purpose is not clear)	3	13
Removal of the variables is recommended		
Sex	3	13
Date of admission or date of sample taking (these two dates are the same)	6	13
Addition of the variable is recommended		
Phone number	4	13
Use of non-standard registration journals		
Result of primary testing for HIV is indicated in non-standard registration journal	4	5
Reporting to the NCDCPH using form # 3		
Sending both parts of the form in the same envelope	10	13
Personnel not familiar with proper sending procedure	2	10
Financial problems	3	10
Absence of necessity	3	10
No explanation	3	10
Ways of reporting with form # 3		
In a sealed envelope, by post	0	13

In a sealed envelope, with the help of courier	2	13
Without a sealed envelope, with the help of courier	11	13
Timely reporting to the NCDCPH with form # 3 (till 7 th of each month)	11	13

Table 18: Anonymity/confidentiality in antenatal clinics

	Number	Total
Journal # 1c		
Patient's name is indicated	1	13
The journal is stored in the office room in the locked cabinet	6	13
The journal is stored in the office room accessible to others	7	13
Asking name of the pregnant woman in the laboratory	10	13
Name is indicated on the referral form	3	13
There is a designated person, responsible for data safety in the facility	5	13
The facility has a document on data safety and confidentiality procedures	1	13
The document could be observed on site	0	1