WHO Regional Technical Consultation on the Dissemination of Consolidated Guidelines on HIV Testing Services

REPORT

15-16 December 2015

Astana. Kazakhstan

World Health Organization
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Abstract

HIV testing is the gateway to HIV prevention, treatment, care and other support services. The Joint United Nations Programme on HIV/AIDS (UNAIDS) and the World Health Organisation (WHO) have endorsed global goals to achieve "zero new HIV infections, zero discrimination and zero AIDS-related deaths" by 2030. In addition to this, the new global 90–90–90 targets call for 90% of all people with HIV to be diagnosed, 90% of people with HIV diagnosed to receive ART and 90% of those on ART to have a suppressed viral load by 2020. The first 90 – diagnosis of HIV – is essential to both subsequent targets.

The new WHO Consolidated HIV Testing Services Guidelines aim to address gaps and limitations in current approaches to HIV testing services. The Guidelines collate existing guidance relevant to HIV testing services and identify issues and approaches for effective delivery of HIV testing services across a variety of settings, contexts and populations. In December 2015 the WHO Regional Office for Europe undertook a regional consultation aimed at disseminating the new WHO HIV Testing Services Guidelines in the WHO European Region. The consultation also aimed to identify barriers and share strategies to scale up HIV testing services in the Region.
The presentations, discussions and key recommendations and conclusions from the consultation are presented in this report.

Keywords

AIDS
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List of abbreviations and acronyms

AIDS	Acquired immunodeficiency syndrome
ART	Antiretroviral therapy
ARV	Antiretroviral
ANC	Antenatal care
CD4	T–lymphocyte cell bearing CD4 receptor
CDC	[United States] Centre for Disease Control
CSW	Commercial sex worker
ECDC	European Centre for Disease Control
EU	European Union
GP	General practitioner
GBP	Great British Pound
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HTC	HIV testing and counselling
HTS	HIV testing services
HIV	Human immunodeficiency virus
MSM	Men who have sex with men
MTCT	Mother to child transmission
NGO	Non-government organisation
NRC	National reference centre
OST	Opioid substitution therapy
PCR	Polymerase chain reaction
PITC	Patient initiated testing and counselling
PLHIV	People living with HIV
PMTCT	Prevention of mother-to-child transmission (of HIV)
PEP	Post-exposure prophylaxis
PrEP	Pre-exposure prophylaxis
PWID	People who inject drugs
RDS	Respondent-driven sampling
RDT	Rapid diagnostic tests
STI	Sexually transmitted infection
SW	Sex worker
TB	Tuberculosis
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations International Children’s Emergency Fund
VCT	Voluntary counselling and treatment
VL	Viral load
WHO	World Health Organization

Contents

Background

HIV testing is the gateway to HIV prevention, treatment, care and other support services. Individuals acquire their knowledge of their HIV status through HIV testing services (HTS): a component crucial to the success of the HIV response. The Joint United Nations Programme on HIV/AIDS (UNAIDS) and the World Health Organisation (WHO) have endorsed global goals to achieve "zero new HIV infections, zero discrimination and zero AIDS-related deaths" by 2030. Because of the potential serious medical, social and psychological consequences of misdiagnosis of HIV (either false-positive or false-negative), all programmes and people providing HIV testing must strive also for zero misdiagnoses.

The new global 90–90–90 targets call for 90% of all people with HIV to be diagnosed, 90% of people with HIV diagnosed to receive ART and 90% of those on ART to have a suppressed viral load by 2020. The first 90 – diagnosis of HIV – is essential to both subsequent targets.

There is a high proportion of late diagnoses in the WHO European Region indicating there is a delay in HIV testing. The high and increasing number of AIDS cases in the East, and low CD4 count at diagnosis is also indicative of late HIV diagnosis. In order to decrease the number of late diagnoses, the current organisation of HTS needs to be reconsidered to include more innovative approaches and services, particularly for high risk populations. These services should be accessible and targeted toward key populations in order to ensure earlier diagnoses and initiation of HIV treatment and linkage to care. This will result in improved treatment outcomes, reduced morbidity and mortality and will contribute to preventing HIV transmission.

The new WHO Consolidated HIV Testing Services Guidelines aim to address gaps and limitations in current approaches to HTS. The Guidelines collate existing guidance relevant to HTS and identifies issues and approaches for effective delivery of HTS across a variety of settings, contexts and populations. In addition, this document provides a new recommendation to support HTS by trained lay providers, considers the potential of HIV self-testing to increase access to and coverage of HIV testing, and outlines focused and strategic approaches to HTS that are needed to support the new UN 90–90–90 targets. Moreover, this guidance will assist national programme managers and service providers, including those from community-based programmes, in planning for and implementing HTS.

In December 2015 the WHO Regional Office for Europe undertook a regional consultation aimed at disseminating the new WHO HIV Testing Services Guidelines in the WHO European Region.

The objectives and expectations of the consultation were to:

1. Present and discuss the WHO Consolidated HTS guidelines with national counterparts, civil society, the UN and other technical partners and donors.
2. Present and discuss evidence-based HTS polices, guidance, approaches and best practice examples from across the Region to improve early HIV diagnosis and facilitate linkage to prevention, treatment and care.
3. Address barriers and facilitators for the expansion of testing by trained lay providers to increase access to HTS. This included a focus on community based approaches to HTS for underserved and underdiagnosed population groups.
4. Discuss and agree on steps to introduce, adapt, adopt and implement the Consolidated HTS Guidelines to address potential barriers and elucidate the role of civil society, UN and other technical partners and donors and assistance required from the WHO.
5. Link dissemination of the Consolidated HTS Guidelines with the new global 90–90–90 targets and other relevant regional and global strategies (notably the WHO Global Health Sector Strategy on HIV, 2016-2021).

Participants included:

- National counterparts including the managers of HIV/AIDS programmes, STI programmes, PMTCT focal points, experts in epidemiology, HIV (PMTCT), STIs and public health from 12 Eastern European and Central Asian countries, Baltic states and selected countries of Central and Western Europe, representatives of regional, subregional and national civil society organisations involved in provision of services for PLHIV.
- International experts in epidemiology, HIV (PMTCT), STIs and public health.
- Representatives of the WHO Headquarters, WHO Regional Office for Europe and WHO Country Offices.
- Major partner organisations, including UNAIDS, UNICEF, UNFPA, the WHO Collaborating Centres, The Global Fund, CDC, ECDC, civil society organisations.

In total about 90 individuals from 27[1] countries participated in the consultation.

This report summarizes the proceedings, key points and main conclusions from the meeting.

[1] Armenia, Azerbaijan, Belarus, Bulgaria, Croatia, Denmark, Estonia, Georgia, Germany, Greece, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Netherlands, Republic of Moldova, Romania, Poland, Russian Federation, Serbia, Slovakia, Sweden, Tajikistan, Turkmenistan, UK, Ukraine, Uzbekistan.

Proceedings

Opening session

Co-Chairs: Aleksey Tsoy (Kazakhstan) and Melita Vujnovic (WHO, Kazakhstan)

Welcome remarks

Aleksy Tsoy (Ministry of Health and Social Development, Kazakhstan), Melita Vujnovic (WHO Representative, Kazakhstan), Vinay Saldanha (UNAIDS RST), Lali Khotenashvili (WHO Regional Office for Europe), Alexandr Kossukhin (UNFPA), Tatjana Tarasova (UNICEF)

Melita Vujnovich (WHO Representative, Head of WHO Country Office, Kazakhstan) acknowledged and thanked Kazakhstan as the host country for this important regional consultation and welcomed meeting participants. She emphasised the importance of strengthening HIV control and prevention in the WHO European Region including central Asian countries. Dr Vujnovic acknowledged the importance of targets 90-90-90 and for that the crucial role of achieving the first 90 –enabling 90% PLHIV to know their status. The scheduling of this meeting soon after the launch of the WHO HTS Consolidated Guidelines is very timely as it will form a foundation for progress towards achieving the important HTS targets. She wished participants success at the meeting.

Aleksy Tsoy welcomed participants on behalf of the Ministry of Health. The Vice Minister acknowledged the importance of controlling the HIV epidemic and its contribution to the Millennium Development Goals. Kazakhstan has made significant advances in improving the accessibility of HIV services to women, and acknowledged the different epidemiological patterns of HIV between men and women. To tackle these issues, the country has increased funding for HIV with a particular focus on treatment, prevention and care. The Vice Minister acknowledged the importance of the meeting to discuss the new testing guidelines that will contribute to the improvement of HIV and STI control and prevention in the Region and emphasized that Kazakhstan was grateful to host such an important regional event.

The UNAIDS Regional Director, **Vinay Saldanha,** addressed the meeting via video message. Vinay Saldanha acknowledged the importance of the meeting to share the new WHO HTS Consolidated Guidelines. He highlighted importance of the move towards all PLHIV being aware of their infection and offered treatment irrespective of their CD4 count., as this provides important benefits at the individual and population health level. He stated the HTS Guidelines can be used as the basis for future innovation in the way HIV testing services are provided, including the involvement of lay personnel in the provision of testing services, the expansion of rapid testing and home testing, the progress towards self-testing and the use of pharmacies as a setting for test distribution.

Alexandr Kossukhin (UNFPA) welcomed all participants to the meeting. He identified that the first of the 90-90-90 targets (90% of all PLHIV should be tested and know their status) was critical to meeting the latter two targets. This underlines how critical it is that PLHIV know their status, and compels countries to identify new approaches to testing. It is important that testing is scaled up and conducted within the context of good human rights where voluntary testing is absolutely critical.

Tatjana Tarasova (UNICEF) welcomed all participants and emphasised the importance of expanding HIV testing services. She identified that the WHO HTS Consolidated Guidelines offers important new recommendations including that on the involvement of lay personnel in HIV testing service delivery. The consultation meeting was noted as an important platform to discuss and agree on steps to introduce, adapt, adopt and implement the HTS Guidelines that will result in earlier HIV diagnoses and better linkage to prevention, treatment and care.

Introduction to the meeting and setting the scene

Briefing on back ground and expected outcomes (Short overview of the progress towards expanding HIV testing services in the WHO European Region)

Lali Khotenashvili (WHO Regional Office for Europe)

Lali Khotenashvili welcomed the Vice Minister for Health, Alex Tsoy, and all distinguished guests to the meeting and offered her sincere gratitude to Kazakhstan Ministry of Health for hosting the meeting.

A number of important achievements related to the expansion of HTS were noted in the WHO European Region. These included having the highest rates of early infant diagnosis and the highest rates of testing among pregnant women globally, the successful expansion of quality assurance of laboratory services and improvements in the monitoring and evaluation of HTS programs, particularly relating to pregnant women and children. The Region possesses a wealth of experience in HTS service delivery, in spite of its broad geographical spread and range in development status.

However the European Region faces a number of challenges. Up to 50% of PLHIV in the Region do not know their status. This is a particular issue for key populations including people who inject drugs (PWIDs), men who have sex with men (MSM), sex workers (SWs) and migrants, particularly in the Eastern part of the Region. This failure to diagnose PLHIV affects every step of the treatment cascade and most critically people are unable to access lifesaving antiretroviral treatment (ART) and care for their condition.

Lali Khotenashvili identified that many countries define improving the testing strategy as an increase in the number of HIV tests that were conducted. However this is an oversimplification and if an increase in testing is not matched by an increase in the number of HIV positive cases detected, the targeting of the strategy is questionable and not cost effective.

Country's national testing policies and practices target HTS for some professional groups and populations. In absolute numbers, there are many who tested, however often few HIV positive cases (if any) are revealed. Despite this in many countries access to and coverage by HTS services for key populations remains limited. The subsequent linkage to care and other post-test services are also problematic. National HIV programs should continue to expand HTS including access to and coverage for key populations and linkages to post-test services (particularly treatment and care).

A number of factors must underpin the expansion of HIV testing services in the European Region. Services should focus on delivery to key populations and high risk groups. Strategic directions should be epidemiological- and evidence-based and consider the human rights' of PLHIV. The expansion of testing should include an expansion of testing services beyond health care settings and medical professionals to include well-trained lay personnel. The use of rapid testing should be expanded and cover multiple settings.

The policy and practice of HIV testing of population groups including people working in high-risk professions should be revised and testing of low risk groups should cease. Testing of pregnant women in many countries should also be revised and adapted as pregnant women are tested two or more times despite low-level epidemics in these countries.

The meeting is an opportunity to present and discuss WHO Consolidated HTS Guidelines. These aims include:

1. present and discuss evidence-based polices and also guidance, best practice examples of HTS from across the Region for early HIV diagnosis and better linkage to prevention, treatment and care;
2. address barriers and facilitators for HTS expansion by trained lay providers to focus on HTS for those most affected but undiagnosed and underserved;
3. discuss and agree on steps to adapt, adopt and implement the Guidelines in conjunction with the new global 90–90–90 targets and other relevant regional and global strategies (notably the WHO Global Health Sector Strategy on HIV, 2016-2021).

Session 1: Country perspectives on the expansion of HIV testing services

Perspectives from countries on progress and challenges towards expanding HIV testing services

Co-chairs: Saulius Caplinskas (Lithuania) and Anna Marzec-Bogusławska (Poland)

Individual presentations were given by countries about their major achievements, barriers and proposed actions to expand testing. A summary is provided below with the full list available in Annex A.

Armenia

Main achievements:

- All blood agents, over 95% of pregnant women and more than 95% patients with tuberculosis are tested for HIV. There have been no cases of MTCT of HIV and no transmission from blood donors to recipients.
- Testing is available in all regions.
- Key populations have access to HTS. It is also offered to migrants.

Main barriers:

- 51% are diagnosed late (i.e. CD4 <350). Given the funding model anonymous free testing in primary health care settings is not possible yet. Outreach programs run by NGOs focus on key populations but have only yielded one HIV diagnosis.

Proposed actions:

- Routinely offer HTS in healthcare settings, including to partners of pregnant women.
- Harmonising the normative environment.
- Improve testing among migrants, particularly in metropolitan areas.
- Increase the motivation for testing in the general and key populations through awareness raising campaigns.

Uzbekistan

Main achievements, barriers and proposed actions:

- The country has recently received a new grant from the Global Fund, with an additional 1.5 million allocated internally for testing. It will allow further expansion of HIV testing services.
- ART has been available since 2006.
- The country has developed national clinical protocols, with includes a specific component on preventing vertical transmission. National clinical protocols follow WHO recommendations. There is a plan to offer ART irrespective of CD4 count.

Azerbaijan

Main achievements, barriers and proposed actions:

- The country is aiming for the 90-90-90 targets.
- The country aims to expand HTS. Each year in August the country hosts a national HIV testing week.
- There are efforts to improve the quality of HTS and strengthen national HIV testing capabilities.
- National information campaigns have been initiated which aim to increase awareness and improve health seeking behaviour there are continuous efforts to increase accessibility of HIV testing services.
- Stigma including (particularly in health care settings) remains a major challenge to be addressed nationally. The country would benefit from international assistance to tackle this challenge.

Ukraine

Main achievements:

- HIV testing is voluntary as for Ukrainians and foreigners. Testing protocols follow WHO-recommendations.
- Rapid testing has been used widely for more than seven years for high risk populations.
- Testing occurs at many levels within healthcare including among NGOs.
- Mobile outpatient services are provided, including assisted self-testing.
- Dried blood spots are used for the early diagnosis of HIV testing in infants born to HIV-positive mothers in four pilot oblasts.

Main barriers:

- Humanitarian catastrophes and war has created barriers to effective service delivery.
- A shortage of healthcare personnel limits the amount of testing that can be undertaken.
- There is a high proportion of undiagnosed HIV cases and AIDS cases at diagnosis.
- Patients are lost between diagnosis and referral to facilities for treatment.
- Access to services is complicated for key populations (especially MSM).
- There is a fragmented system of HIV service provision for the general population and prisoners, and lack of equity in access to services at the local level.
- Stigma and lack of confidentiality remain an issues in public health settings.
- The monitoring and evaluation system needs improvement.
- There are significant financial limitations, especially in light of the cessation of Global Fund funding in 2017.

Proposed actions:

- Create a unified national HIV testing strategy and revise the HIV testing algorithms.
- Review the epidemiological situation and methods for targeting key populations.
- Develop a single unified registration system to monitor PLHIV.
- Provide HTS in primary healthcare settings via NGOs, mobile clinics, community care groups, and assisted self-testing (with additional funding).

- Improve service linkages, including the decentralisation and integration of services, social support and strengthened cooperation with NGOs.
- Implement campaigns to improve the motivation for testing and stigma reduction among health care workers.
- Identify funding mechanisms to sustain the Global Fund projects beyond 2017.

Turkmenistan

Main achievements:

- Testing occurs at many levels within the healthcare system it is accessible.
- Numerous types of testing are conducted including rapid testing with both saliva and blood.
- People from high risk groups are able to access to HIV testing.

Main barriers:

- A long time lapses between screening and confirmation of the result, which leads to a loss of patients.
- Currently rapid testing and NGO involvement in care isn't legally supported (though this is planned for in 2016).

Proposed actions:

- Amendment of the legislation to support rapid testing.
- Expanded participation of NGOs is planned, Initiate manufacturing of rapid tests in Belarus
- Change the legislative context and redistribute funding to prioritise access to HTS services for at risk populations, particularly PWIDs.

United Kingdom

Main achievements:

- 47% of HIV diagnoses occur outside of traditional HIV testing services.
- The home sampling strategy yields a 1.4% positivity rate.
- Legislation was recently changed to allow home testing, which can be ordered online.
- National HIV partner notification standards were produced in 2015. The strategy yielded a 21% positivity rate.

Main barriers:

- Coverage in genitourinary medical clinics is highly variable. It also varies significantly between different groups, where heterosexuals are more disadvantaged.
- Expand HIV testing in high prevalence situations, particularly in non-traditional healthcare settings line with the National HIV Guidelines.
- There is a concern that people with indicator conditions (i.e. conditions with an undiagnosed prevalence $\geq$1/1 000) are not offered HIV screening.

Proposed actions:

- Rollout of the national self-sampling/home sampling initiative, with the assistance of the local councils and Public Health England.
- Update the National HIV Testing Guidelines, and consolidate a number of existing government and professional organisation's guidelines in the process.

Bulgaria

Main achievements:

- A strong legal framework supports HTS expansion. The national guidelines for HTS were developed in 2002 and updated in 2012.
- Testing occurs in health care settings and community/mobile settings.
- Rapid testing is available, and can be used in all settings (including mobile units).
- Testing is free for all inhabitants.
- 65% of new diagnoses occur among vulnerable groups.

Main barriers and proposed actions:

- Strengthen leadership, coordination and partnership at the national and local level.
- Improve the accessibility of services and increasing community engagement in service delivery.
- Offer routine free of charge testing to PWIDs, patients with TB and STIs, prisoners, migrants and mobile population and partners of PLHIV.
- Ensure sustainable financing, including: resource mobilisation strategies; equitable and efficient allocation of funds for HIV/AIDS prevention and control; engagement of the Government, private sector, local and international donors.
- Improve quality assurance processes.
- Strengthen human resource capabilities and build the capacity of healthcare providers and NGOs.
- Strengthen and better integrate monitoring and evaluation systems.

Turkmenistan

Main achievements and barriers:

- With the introduction of the state health program the quality and efficiency of healthcare services has improved dramatically.
- HIV is a health priority and is governed by numerous laws and the national HIV programs.
- The HIV program is implemented by an interdepartmental committee though coordinated by the Ministry of Health and supported by a range of international NGOs.
- The programme is carried out across all regions of the country.
- The programme focuses on information dissemination with a particular focus on young people and HIV prevention, access to testing, and how to treat if a person is diagnosed as positive.
- Testing can be provided anonymously and free of charge (with the exception of foreigners).

- Mandatory testing occurs for blood donations, tissue transplants, HIV indicator conditions pregnant women.
- 4th generation tests are used
- National HIV protocols follow the WHO recommendations.

Proposed actions:

- Modernise the laboratory for the diagnosis of HIV, including improving equipment, better compliance and appropriate testing algorithms.

Croatia

Main achievements:

- Implementation of the Global Fund project "Scaling up the HIV/AIDS response" resulted in increased access to testing.
- Sustainable financing has been obtained after the cessation of Global Fund financing.
- Free and anonymous testing at 10 HTC centres for all high risk populations which includes referral to ART and care.
- HTS expansion has occurred via community testing and rapid testing.

Main barriers:

- Perception of low risk leads to late presentations in MSM.
- Oral rapid tests are expensive. A larger range of tests are required (currently only two are available).
- Legal restrictions around sex work means it is hard to target sex workers when programming.
- Stigma and discrimination leads to low rates of HIV testing.

Proposed actions:

- Maintain political will to sustain programs and try to increase funding.
- Continue with the work of HTC centres including strengthening community based HIV testing with key populations.
- Intensify health promotion and HIV testing with MSM. Emphasise the importance/benefits of regular testing and the high rate of undiagnosed PLHIV.
- Intensify youth sexual health education.
- Undertake anti-stigma campaigns.
- Continue to conduct biobehavioral studies, including: research to better understand non-testing patterns and low risk perception, improving data quality, a detailed analysis of trends, continuum of care and risks, and STI surveys.

Tajikistan

Main achievements and barriers:

- National program on the control of HIV/AIDS 2011-2015 defines HTS and supports expanding the national protocols in line with the WHO recommendations.
- There has been an annual increase in testing and the proportion of those tested positive for HIV.
- The HIV testing algorithm for pregnant women was revised in accordance with WHO recommendations.
- A protocol for dried blood spot protocol for early infant diagnosis has been developed
- The use of rapid tests is underway (funded by the Global Fund).

Proposed actions

- Strengthen HTS in primary healthcare.
- Strengthening national HTS capacities.

Denmark

Main achievements:

- The 2013 Guidelines on HIV Testing shifted the focus away from HIV as a deadly disease and normalized conditions. This led to an increase in the number of GPs undertaking testing. It also decreased the focus on pretest counselling.
- Free testing is offered in all healthcare facilities.
- NGO testing with non-medical staff is offered in all large cities.
- There is a strong focus on MSM and migrants.
- If a rapid test returns a positive result in non-medical settings, to ensure that people are not lost to follow up people are personally guided from the testing to the healthcare facility for re-testing and treatment.

Main barriers:

- The low threshold to entry is still too high for most vulnerable groups.
- GPs need knowledge, training, and policy makers must continue to generate interest.
- MSM are tested though not with sufficient regularity.

Proposed actions:

- Initiate home-based testing.
- Disseminate free oral tests.
- Generate additional financing.

Estonia

Main achievements:

- New testing guidelines were developed in 2012 which encourage a decentralisation of testing
- Rapid testing has become more available in anonymous HIV counselling and testing sites and youth counselling centers
- The rates of testing are increasing in all key populations.
- In some regions up to 90% of HIV-infected people who inject drugs know their status. Knowledge of HIV-status is much lower among other vulnerable groups.

Main barriers:

- Low knowledge and low risk perception still exists, for example among MSM.
- Healthcare professionals have poor knowledge of the HIV testing recommendations.
- Vulnerable groups, particularly PWID experience stigma from healthcare professionals
- Budget limitations, particularly the allocation of funding.

Proposed actions:

- Increase the HIV-related information and training for healthcare professionals.
- Refine the targeting of testing, particularly for vulnerable populations.

Slovakia

Main achievements and barriers:

- Mandatory testing is only for blood, sperm, tissue, organ and breast milk donations.
- From 1991 there was routine testing of pregnant women.
- Free voluntary testing and counselling is widely available.
- Anonymous HIV testing is provided by the national reference centre for HIV/AIDS in Bratislava and a few other publically funded services.
- Community based testing using rapid tests is available only in Bratislava for SWs and PWIDs. The barrier to further rollout is financial in nature.
- In 2014 testing of HIV, HBV, HCV and treponema pallidum infection was provided to 400 MSM via the EU project SIALON II using a respondent driven sampling (RDS) method. Until now only one NGO is involved in HIV prevention among MSM.
- Due to the covert discrimination of PLHIV only a few, very small self-help groups exist in some NGOs that work with other groups of people engaging in high risk behaviours.

Proposed actions:

- Upgrade the expert guidelines for providing HIV prevention in Slovakia
- Increase the rate of HIV testing, especially in populations at high risk.
- Support community based testing in NGOs working with high risk groups.
- Engage more organisations in HIV/HBV testing week.

Georgia

Main achievements:

- There has been universal access to HTS and ART since 2004.
- Recently ART has been offered irrespective of CD4 count.

Main barriers:

- HTS coverage in PWIDs and MSM is 25%.
- Many PLHIV are diagnosed late, with 39% with at a CD4 count of <200, and 61% with a CD4 count of <350 at diagnosis.

Proposed actions:

- Increase HTC coverage and testing among high risk populations.
- Ensure the adequacy of state budget allocations for the HIV program after the end of Global Fund support.
- Ensure the country's HIV program is high-quality and sustainable.

Serbia

Main achievements:

- Two HIV strategies covering the next five years have been developed since 2005.
- Free and anonymous counselling and testing for all high risk populations is widely available via a well-functioning network of 26 VCTs centres which include referral to ART and care.
- Strong partnerships exist between health authorities and civil society to build public awareness about HIV. HTC has been provided beyond healthcare facilities using rapid tests since 2008.
- HTC is offered for people in prison settings.
- Improved integration of services via provider initiated testing for TB patients and TB screening among PWIDs, SWs and OST recipients.
- Improvements of the monitoring and evaluation system including mapping HTS sites and number of people who received VCT and their test results disaggregated by the categories of people tested people. This is aggregated up to the national level.

Main barriers:

- No sustainable mechanism exists for HIV testing services wishing to use rapid tests.
- There is a low level of comprehensive knowledge, insufficient perception of real risk and high level of stigma and discrimination related to HIV among general population and in healthcare settings, and healthcare providers are reluctant to offer HIV testing.
- There are low levels of HIV testing and retesting among MSM, PWIDs and SWs. This is associated with low perception of risk and HIV related stigma and discrimination.

Proposed actions:

- Reduce stigma and discrimination relating to HIV.
- Develop the new National Strategic Plan for HIV (2016-2020) with a focus on tailored HIV testing services for key populations in multiple settings.
- Increase access to and uptake of HIV testing services those who are undiagnosed and at greatest risk (MSM, PWIDs, SWs).
- Scale up outreach of voluntary confidential/anonymous counselling and testing for HIV using rapid tests. This may include a provision for non-medical staff to conduct testing (though this requires further stakeholder consultation and legislative reform before being implemented).
- Improve the integration of HIV testing services with other services (e.g. HBV and HCV testing, OST centres, screening and testing for STIs, TB treatment).
- Scale-up implementation of antenatal voluntary counselling and testing of pregnant women based on "opt -out" strategy (dependent on financial and human resources).

Serbia

Main achievements:

- HIV strategies have been developed covering the next five years.
- Increase existing testing sites to 26 in all regional institutes of public health.
- Testing is offered for people in prison settings.
- Rapid testing has been offered since 2008.
- Improved integration of services via provider initiated testing for TB patients and TB screening among PWIDs, SWs and OST recipients.

Main barriers:

- No sustainable mechanism exists for HIV testing services wishing to use rapid tests.
- There is a high level of stigma and discrimination in healthcare settings, and healthcare providers are reluctant to offer HIV testing.
- There are low levels of HIV testing and retesting among MSM, PWIDs and SWs.

Proposed actions:

- Reduce stigma and discrimination relating to HIV.
- Develop the new National Strategic Plan for HIV (2016-2020) with a focus on tailored HIV testing services for key populations in multiple settings.
- Increase access to and uptake of HIV testing services those who are undiagnosed and at greatest risk (MSM, PWIDs, SWs).
- Scale up outreach of voluntary confidential/anonymous counselling and testing for HIV using rapid tests. This may include a provision for non-medical staff to conduct testing.
- Improve the integration of HIV testing services with other services (e.g. HBV and HCV testing, OST centres, screening and testing for STIs, TB treatment).
- Scale-up implementation of antenatal voluntary counselling and testing of pregnant women based on "opt -out" strategy (dependent on financial and human resources).

Greece

- The national guidance on HIV testing based on international guidelines was finalised in 2014 which consolidated a number of guidance documents into one state of art document for healthcare professionals and individuals.
- Development and standardisation of referral documents, informed consent for the quality assurance of HIV testing procedures.
- Development of a brief information leaflet on HIV testing (available online and in all HTS).
- Improvements to the monitoring and evaluation system including mapping HTS sites, the type of screening tests (3^{rd} or 4^{th} generation), and improved data around patients sociodemographic characteristics, their reason for testing as well as the number of individuals who have received their HIV test results.

Main barriers:

- The cost of the initial screening test. Until 2011 HIV test was provided for free in all public hospitals and AIDS reference and control centres (by law). Beginning in 2011 the initial screening test was charged. As time progressed and due to the deepening financial crisis the managers of the hospital adopted the aforementioned practice. For all insured individuals testing is free and is covered by health insurance. For uninsured individuals (in the majority of public hospitals) testing is free and is covered by the budget of the hospitals. In AIDS reference and control centres HIV testing is still free for all individuals.
- There has been a dramatic reduction of the budget received for HIV which affects the ability to use confirmatory assays.
- There is a lack of human resources, so it is hard to collect data for the monitoring system. There are also difficulties with low awareness of health care professionals regarding specific issues relating to HIV testing (especially in rural areas).

Proposed actions:

- Update testing guidelines in 2016 for the clinical settings and community settings.
- Conduct awareness raising campaign for healthcare workers to encourage them to use the monitoring system.
- Identify new sources of funding to cover HIV testing and try to ensure the current budget.
- Activities aimed at increasing the number of HTS where individuals can have access to free and anonymous testing or increasing the budget for the AIDS National Reference and Control Centers.
- Involve government organisations and NGOs in HIV testing in their proposals for budgeting should include budget for further confirmation and linkage to care.

The Russian Federation

Main achievements:

- HIV testing is available in all healthcare facilities.
- The legislation allows testing that is voluntary, confidential and anonymous (if desired).
- Free HIV testing is available in all public health organisation.

Main barriers:

- Insufficient HIV testing for PLHIV who are middle aged.
- A lack of coordination of the activities of a number of NGOs and regional executive authorities.

Proposed actions:

- Expand the HIV screening coverage in the worst affected regions of the Federation.
- Expand the HIV screening coverage for high risk populations.

Kazakhstan

Main achievements and barriers:

- In 2015 the HIV testing Guidelines were updated to include anonymous testing.
- National guidelines follow WHO recommendations.
- HTS services are widely available in the country.
- NGOs are involved in HTS.
- Rapid testing is widely available and used for many populations including pregnant women.

Proposed actions:

- Expand access to rapid tests via home testing and distributing testing kits via pharmacies.
- Improve the accessibility of voluntary counselling and testing for key populations.
- Improve the testing coverage for high risk populations.

Poland

Main achievements:

- The National AIDS Centre works with a multi-sectoral mandate. The program possesses sustainable financing managed by the Ministry for Health.
- There is one monitoring and evaluation system at the national level.
- HIV testing is widely available via a well-functioning network of 30 VCTs.
- Strong partnerships exist between health authorities and civil society to build public awareness about HIV.
- National recommendations on HIV/AIDS are expanded and updated annually.
- HIV testing includes pre- and post-test counselling, linkage to care and immediate access to treatment.

Main barriers:

- There is insufficient research on STIs and viral hepatitis.
- There is limited national data on HIV/AIDS and STIs.
- Access to low-budget venereology clinics is low.
- By the law only those 18 years and older are eligible for HIV testing.
- Access to rapid HIV testing is limited.
- Testing for HIV is not integrated with testing for STIs and viral hepatitis (due to legislative issues).

Proposed actions:

- Continue to expand the VCT network.
- Strengthen linkages to care, particularly for STIs.
- Develop testing capacity in appropriate healthcare settings by increase working hours and the number of consultants in VCTs (requires additional funding).
- Secure organisational financing for the new HIV strategy.
- Target communication towards key populations.

Kyrgyzstan

Main achievements:

- The number of tests being undertaken has increased, as has the number of HIV diagnoses.
- Coverage of testing for TB patients, SWs and MSM has been increasing though the absolute rate among MSM is still very low.

Main barriers:

- The country does not use 4th generation HIV tests.
- Improve the early diagnosis of babies born to mothers living with HIV.
- There is a lack of lab accreditation.

Proposed actions:

- Improve the transport system for blood products to the laboratory.
- Open a PCR laboratory in another region.
- Increase the focus on key populations.
- Undertake the mentoring program offered by WHO.
- Optimise the testing algorithm.
- Reduce testing time from six to one or two weeks.
- Reduce the time between diagnosis and treatment initiation.

Latvia

Main achievements:

- The rights of PLHIV are protected by legislation.
- A network of HIV prevention points exist (18 sites in 16 cities) where they also provide needle exchange and anonymous testing.
- Pilot project on in testing in key populations (MSM and SWs) using mobile outreach has been conducted.

Main barriers:

- The number of HIV prevention points is limited and depends on the involvement of municipalities.
- There is a low level of uptake of HIV testing by high risk populations (SWs and MSM) and those in prison.
- Free of charge HIV laboratory testing is available only with referrals to specialists and the approval of the national health service.
- There is a low level of awareness in the general population about where to access testing services.

Proposed actions:

- Change the current system of financing of healthcare services to ensure better access to HIV testing (including rapid testing).
- Expand the network of HIV prevention points and mobile services for high risk populations to ensure the availability of HIV testing where the risk populations are located.

Netherlands

Main achievements:

- There has been a decline in HIV diagnoses, predominantly among MSM. This is linked to an increase in HIV testing.
- Online testing is offered for risk populations.
- There is a good system of partner notification and a website for anonymous partner notification.
- There have been improvements in the linkages to care where PLHIV are treated immediately regardless of CD4 count.
- The new treatment for hepatitis C is offered.
- The campaign “Out of the closet with HIV” about the symptoms of acute HIV has been rolled out.
- There were no cases among PWIDs last year.

Main barriers:

- There is still a high proportion of PLHIV who are diagnosed late.
- It is difficult to get GPs to undertake testing and will still only test risk populations.
- Stigma is still an issue.
- It is a struggle to reach heterosexual men and migrant populations with undiagnosed HIV.

Proposed actions:

- Continue to enhance HIV testing to reduce the rate of undiagnosed PLHIV and late presenters.
- Delivery special training for GPs to promote a proactive approach to testing.
- Support efforts to diminish HIV related stigma.
- Conduct a PrEP trial among MSM in Amsterdam and assess the need and cost/benefit of a broader rollout of PrEP.
- Investigate the viability of social network testing of MSM.

Lithuania

Main achievements:

- Free of charge testing is offered for certain subpopulations (people with TB, pregnant women, PWIDs/those on OST, prisoners).
- The number of testing sites and the rate of HIV tests per 100,000 have increased annually.
- HIV testing has increased among key populations in the past five years.
- There has been an increase in the number of PWIDs who have received a HIV test in the past 12 months.

Main barriers:

- Insufficient access to free of charge testing for high risk groups such as MSM, CSW.
- A lack of HIV testing in STI clinics and general practice.

Proposed actions:

- Increase the number of rapid HIV tests to 3-4%, with a biannual evaluation process.
- Maintain HIV testing coverage among pregnant women at ≥95 %.

Moldova

Main achievement

- HTS services are voluntary, anonymous and free of charge. HIV testing is available for all inhabitants regardless of citizenship and availability of insurance. NGOs are able to provide HTS.

Main barriers:

- Despite the wide availability of HTS more than 50% of those diagnosed are late presenters.
- HIV testing coverage of key populations remains low.
- Access to HIV testing remain limited for people in some rural areas
- The testing algorithm for confirmatory testing is complicated.

Proposed actions:

- Expand HIV testing coverage for at risk populations by deploying new testing practices including mobile units through NGOs using rapid testing.
- Revise the HIV testing algorithm.
- Introduce rapid testing in general practice and family medicine, particularly in rural areas.
- Improve the legal basis to distribute tests through pharmacies.

The country presentations were followed by questions and a very active general discussion. This discussion focused on the progress achieved in the countries in expanding HTS and the breadth of experience in doing so in the Region. Participants also identified challenges that should be addressed when expanding HTS. Issues identified included the following:

- The high proportion of late presenters and AIDS cases at diagnosis were mentioned by the majority of countries. The waiting times between screening and confirmation of the result contributes to this loss of patients. In some countries patients are also lost between the diagnosis and treatment phases of care suggesting the poor linkages to post-test services.
- In many countries the rates of testing appear to be high within established healthcare facilities. A successfully targeted testing strategy should see an increase in the number of tests together with an increase in the number of diagnoses. However this is not the case in many countries. In many cases these more “traditional” healthcare settings struggle to access key populations, which suggests they are not appropriate setting for a scale up of testing.
- Stigma and discrimination, particularly in healthcare settings is still problematic. This can be seen in that healthcare professionals can be reluctant to offer testing services due to fear or lack of knowledge and there is a lack of confidentiality for key populations. This is a key reason key populations fail to access traditional healthcare settings for HIV testing. Tackling stigma and discrimination and protecting individuals’ confidentiality remain important challenges of national HIV programs. The WHO was asked for assistance with these issues. It was suggested that the immediate help could be the reinforcing the importance of confidentiality as one of “5Cs”.
- There was an ongoing challenge for countries in targeting key populations for HTS. Future directions should include expanding testing to non-medical settings including community testing and the involvement of lay personnel. However, some countries expressed reservations towards expanding community involvement. The low yield of cases revealed by NGOs that run outreach programs was mentioned as a reason. In number countries NGO involvement in HTS provision is not legally supported.

Discussions regarding the importance of community settings for HTS expansion as well as related legal constraints continued throughout the rest of the meeting.

- Some countries have struggled to reach heterosexual men and they were frequently diagnosed via contact tracing of women living with HIV.
- In many countries in the region pregnant women have not been tested universally because it was seen to be unnecessary. In some countries the reverse is true, and pregnant women have been tested excessively. The testing of pregnant women should be dependent on the epidemiological situation in each country and countries need to consider the allocative efficiencies of their testing strategy as a whole.
- The age of consent creates legal barriers for young people who wish to access HIV testing. In some countries by law only those 18 years and older are eligible to be tested.
- Access to rapid HIV testing is still limited in a number of countries in the European Region. In some countries rapid testing is not legally supported. In others there is no capacity to undertake rapid testing including lack of trained personnel.
- The complicated national testing algorithms were noted. This emphasised the need to review and adjust the national testing algorithms in line with WHO recommendations. It also highlighted the need to initiate and strengthen the quality assurance systems of HTS
- Some countries lacked monitoring and evaluation system, particularly those that assessed linkages.
- There was a lack of capacity and human resources in primary healthcare to offer high quality HTS. These issues include a low awareness by GPs regarding HIV testing and their reluctance to offer HTS. This emphasises the need to raise awareness and build capacity amongst this sector, and policy makers must continue to focus on the need to rollout HTS in the primary healthcare setting.
- Many countries should continue to improve the accessibility of services and community engagement in service delivery. The low threshold services still present barriers to entry which are too high for most vulnerable groups.
- There is a concern that people with indicator conditions (i.e. opportunistic infections) are not offered HIV screening. This points to the need for stronger leadership, improved coordination and partnerships at the local and national level.
- Financial constraints were mentioned by many countries across the Region, which has a disproportionate impact on testing in high-risk populations. Healthcare facilities are facing restricted budgets which affects the uptake of HIV screening and confirmatory testing. Some countries mentioned an inability to offer anonymous, free testing because of specific funding structures or legislation. These financial constraints will become increasingly problematic in light of the cessation of Global Fund resourcing. Countries emphasised the need to identify sustainable resource mobilisation strategies, equitable and efficient methods for allocating HIV/AIDS prevention and control funding, and engaging government, private sector, local and international donors.

Session 2: Service delivery approaches for HIV testing

WHO Consolidated HTS Guidelines: Service delivery approaches. Ensuring linkages to care

Co-chairs: Tetyana Tarasova (UNICEF) and Egor Serebrykov (Russian Federation)
Lali Khotenashvili (WHO Regional Office for Europe)

The WHO Consolidated HTS Guidelines were released July, 2015. The Guidelines aim to address the gap in HIV testing, improve the focus and targeting of testing, increase the quality of testing to prevent misdiagnosis and support better linkages in the chain of HIV service delivery. The WHO Consolidated HTS Guidelines emphasise that the five C's in HTS: consent, confidentiality, counselling, the correct result and connection. The Guidelines are centred on the 90-90-90 targets.

The available data and country presentations suggested that in the WHO European Region only 50% of PLHIV are diagnosed. In some countries this figure is even lower. This is a far cry from the ambition to reach 90% of all PLHIV knowing their status. An evaluation of the current situation suggests there are a number of changes which must occur to meet this ambitious goal. These changes should include improved integration, decentralisation, and professional task shifting to support greater quality and efficiency of HTS.

WHO recommends providing access to HTS via a variety of approaches within healthcare and community settings in accordance with the local epidemiology and context. Currently, provider initiated testing (PITC) settings is a more efficient model in healthcare settings. Integrated HTS aims to routinely offer HTS to all those who access medical care and have indicator conditions. Despite the fact that VCT is more expensive and require to be clients' initiated, the standalone VCT in conjunction with other approaches still has the potential to expand HTS coverage. Despite the PITC approach being offered routinely it should not become mandatory or compulsory and the right of client to decline testing and services must be maintained. HTS should be offered to the clients in tuberculosis, sexually transmitted infection and drug treatment settings.

Dr Khotenashvili also presented on HIV self-testing: the process by which a person who wants to know his or her HIV status collects a specimen, performs a test and interprets the results by him or herself. This does not replace the need for testing in accordance with national testing algorithm, and a reactive result will require additional testing. The distribution of testing kits should be accompanied by instructions that a nonreactive test result should be followed by a second test if there has been a recent high-risk exposure to HIV.

HIV self-testing may increase uptake of HIV testing among people not reached by other HIV testing services and first-time testers. In general, studies report that HIV self-testing is highly acceptable among a variety of populations. WHO has not issued recommendations on HIV self-testing due to gaps in the current evidence though they have developed a technical update describing the potential benefits and challenges of using this approach, and is working with collaborators to generate the additional evidence needed to issue recommendations and guidance on this topic. This work should become available by the end 2016. Meeting participants were

encouraged to express their opinions about self-testing in the Working Group sessions on the second day of the HTS meeting.

Dr Khotenashvili also spoke on the importance of linkages to care PLHIV. Linkage to care involves a series of activities that support people diagnosed with HIV to engage with prevention, treatment and care services that are appropriate for them. Prompt linkage to HIV care and treatment is ideal and should be encouraged, though this may not occur as people need time to accept the diagnosis and seek appropriate social support. Factors that may contribute to poor linkage to care and a failure to enrol in treatment client factors (e.g. feeling healthy and not relating to their HIV diagnosis, depression, a lack of social or family support, fear of disclosure) to social or cultural factors (e.g. stigma and discrimination), structural or economic factors (e.g. a lack of transportation) and barriers within the health system (e.g. poor referral systems, stigmatising or unfriendly services and long waiting times in facilities).

Good practices to increase linkage include:

- Well integrated services
- Providing on-site or immediate CD4 testing with same-day results
- Providing assistance with transport (such as transportation vouchers)
- Decentralised ART provision
- Involvement of trained lay providers who can act as peer navigators
- Improved post-test counselling by community health workers
- The use of new communication technologies, such as mobile phones and text messaging (particularly for young people)
- Activities to reduce stigma and increase community-based support for treatment adherence and retention
- Improve service delivery, reporting and feedback mechanisms
- Reduced barriers to care (including administrative requirements such as the need for identification cards for enrolment in HIV care).

Monitoring people's linkage following HIV testing is critical to strengthening treatment and prevention cascades.

Dr Khotenashvili also noted that it is important to promote testing of partners. This may increase the rates of HIV testing and linkage to care, as may testing in antenatal settings. In the context of the PMTCT of HIV, it is important that men are also included as a target group.

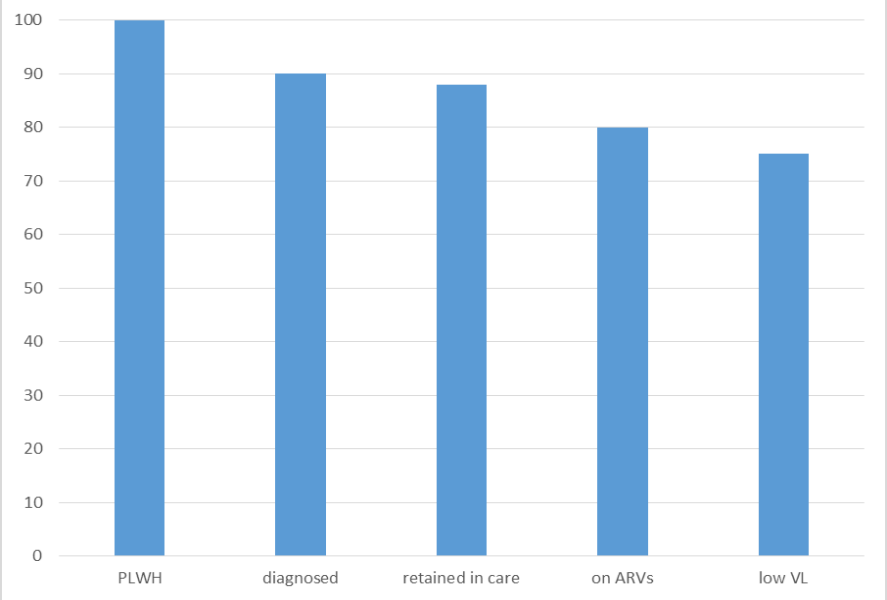
Principles and approaches to HIV testing service delivery, linkages to care. Sharing the experience accumulated in Region:

Facility based HIV testing in Denmark

Susan Cowan (Denmark)

In Demark the HIV epidemic is concentrated among MSM. Prevalence in the general population is very low (i.e. less than .02% if the high risk populations are removed).

Figure 1. The treatment cascade in Denmark



There is very little HIV transmission in Denmark from who are known to be living with HIV. There are practically no deaths from AIDS. However there is a stable level of cases from individuals outside of Denmark and from PLHIV who are undiagnosed. This suggests a number of gaps: Migrants and refugees from high incidence countries are not offered or do not accept HIV testing when they arrive in Denmark. However migrants have very low rates of transmission. A majority of transmissions occur in MSM who are newly infected and do not know their status. This is because they had been tested and returned a negative result recently and do not take into account they may have been infected.

HIV among PWIDs is not a problem in Denmark. This is thanks to the successful harm minimisation initiatives, including needle exchange programs and supervised injecting rooms. There is the political will to sustain these initiatives, though the accompanying funding has been lacking. The same issue faces the rollout of PrEP in the country. The current focus is on increasing the rate of testing and renewing anti-stigma campaigns.

Supporting integration and decentralisation of HIV testing services, indicator conditions and improving linkages to care
Ann Sullivan (United Kingdom)

Dr Sullivan encouraged all countries to think about the integration and decentralisation of testing services in their country. Decentralisation refers to a process of delegating authority and resources from the central to other levels of the health system (provincial, regional, district, subdistrict, primary health-care post and community)[2]. Integration refers to the co-location and sharing of services and resources across different disease areas. In the context of HIV, this may include the provision of HIV testing services alongside other health services, such as TB, STI or viral hepatitis services, antenatal care (ANC), contraceptive and other family planning services and screening and care for other conditions [3].

Dr Sullivan noted that decentralisation should focus on increasing the number of sites, and the diversity in the types of sites, organisations and target populations. One ramification of decentralisation that must be considered is an increase in risk: this was managed by clearly documenting care pathways (to HIV treatment and care) and roles and responsibilities (which specifically named individuals) and ensuring robust results management and governance processes.

One example of integration and decentralisation is testing individuals in emergency departments (EDs). Currently in one site in the UK (Chelsea and Westminster Hospital), testing coverage sits at approximately 50%. Testing in EDs is highly acceptable to patients (i.e. 92% consider it acceptable). Another important strategy which has been employed is HIV testing among people who exhibit "indicator conditions". It was the object of the HIDES study[4] to establish the evidence base. Ten indicator conditions were included, and the study (which included a number of countries across Europe) returned a positivity rate of 2.5%. Cost effectiveness was defined in contexts where the HIV prevalence >0.1% was definitively demonstrated.

OptTEST Programme: an EU funded project on "Optimising Testing and Linkage to Care for HIV across Europe" has been developing tools for the implementation of indicator condition-guided testing[5].

These projects are indicative of a paradigm shift in the UK where they are more willing to take risks and be less cautious. They have been rewarded with a very high proportion of PLHIV who are aware of their status.

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[2] World Health Organisation (2015). Consolidated Guidelines on HIV Testing Services. 5 C's: Consent, confidentiality, counselling, correct results and connection. Geneva, Switzerland: World Health Organisation. http://www.who.int/hiv/pub/guidelines/hiv-testing-services/en/

[3] World Health Organisation (2015). Consolidated Guidelines on HIV Testing Services. 5 C's: Consent, confidentiality, counselling, correct results and connection. Geneva, Switzerland: World Health Organisation. http://www.who.int/hiv/pub/guidelines/hiv-testing-services/en/

[4] More details on the HIDES Studies can be found on the HIV in Europe website http://newsite.hiveurope.eu/Ongoing-Projects/HIDES/HIDES-1http://newsite.hiveurope.eu/Ongoing-Projects/HIDES/HIDES-2

[5] More details on the HIDES Studies can be found on the HIV in Europe website http://newsite.hiveurope.eu/Ongoing-Projects/HIDES/HIDES-1http://newsite.hiveurope.eu/Ongoing-Projects/HIDES/HIDES-2

HIV testing in the Netherlands: current practice and new approaches
Eline Op de Coul (Netherlands)

In the Netherlands the focus is provider-initiated testing and self-testing. STI clinics test high risk populations (i.e. if patients have an STI, are MSM or SWs), though for non-risk groups a referral is made to general practice. GPs target testing to risk populations as well as the general population. It is challenging for GPs to undertake testing as they have competing priorities, doubt about the right groups to test and the financial costs associated with testing. They prefer to undertake a risk assessment before testing. Many challenges associated with testing in general practice were associated with GPs who tended to cling to old patterns of risk-based testing.

A number of alternative testing methods are being trialled in the Netherlands. Self-testing is available to MSM, and the test can be ordered via a website[6]. It requires men undertake a risk assessment, do the test and return the sample. They receive the results online.

Another project focused on migrants and MSM has also used the internet as a dissemination strategy. The project "HIV Test@Home" aimed to trial internet based counselling, increase (earlier) diagnoses of HIV, and gain insights into the acceptability of HIV self-testing. It was promoted online using a targeted social media campaign. The cost to participants was 30 Euros. Preliminary analyses show that almost 600 individuals ordered tests and around 60% of them were MSM. The most common reasons for ordering the test online (as opposed to testing in a clinic) was that it was a rapid test, saved time, didn't require blood and it was anonymous. The project reached many individuals who had never tested before or who had tested a long time ago (approximately half of participants).

These trials identified that a home-testing service for HIV is a feasible, easy to implement and inexpensive tool to identify HIV infections. Current legal bans on HIV home testing in the Netherlands are out of date and should be reconsidered to enable this to take place.

Task sharing of HTS: Increasing the scope of work of lay providers: barriers and facilitators
Cary James (United Kingdom)

Cary James presented a number of projects that took place in the UK in European HIV testing week in 2015. European Testing Week began in 2013, and in 2015 417 organisations participated. It sought to create country-level momentum for testing, as well as to collect evidence for scaling up testing and preparing materials and toolkits for participants.

In 2015, most participating organisations found they benefited from having the week long focus on HIV testing. Approximately 80% of participating organisation reported that the rate of testing at their sites increased, and almost half reported this increase was greater than 50% relative to a normal week. The initiative was not without its challenges, with many organisations reporting insufficient resources, patient barriers to HIV testing, and a lack of political support as problems.

[6] www.mantoman.nl

In 2016, European Testing Week will focus on increasing awareness, participation and implementation of testing activities by lay providers.

Reducing HIV testing stigma: media campaigns
Marina Semenchenko (UNAIDS)

Mariana Semenchenko presented a media campaign that was conducted in a number of Eastern European countries in 2015. It aimed to tackle stigma associated with HIV and encouraged people to test. She noted that in Russia, people do not like to think about HIV, though getting people to think about it and test is critical to reaching the first of the 90-90-90 targets.

The media campaign featured a famous singer and actress who acted as an ambassador to the program. It was supported a high level by the Ministries of Health, and received endorsement from some Ministers and celebrities. An advertisement was developed and disseminated via television and social media channels. The campaign ambassador engaged in many interviews, and a boyband conducted an interview on the importance of HIV testing on a reality television show with two million viewers. Public figures were also recorded undertaking a rapid test in public. The ok.ru website served as an information source and coordinating point for the campaign. It was visited by 1.6 million people during the course of the campaign.

Session 3: Priority populations. Linkages to care

The new WHO recommendations: Lay providers, community HIV testing and linkages to care
Co-facilitators: Nikos Dedes (EATG) and Natalia Podogova (EHRN)
Lali Khotenashvili (WHO Regional Office for Europe)

Lali Khotenashvili noted that for many years HIV advocates have been encouraging a move to HIV testing in community settings. Community-based testing includes home based testing, mobile/outreach testing to community sites through mobile vans or tents in places such as churches, parks, bars, and clubs, at cruising sites or saunas or testing in the workplace. As a strategy, testing in community settings is important for migrants and other population groups who do not access traditional healthcare services.

To undertake community-based testing there should be a situational assessment to understand how it may be integrated into the existing system. There should be a legal context that supports community-based testing and the populations it is targeting. Permits, guidelines and remuneration should be considered.

The WHO has recently introduced a new recommendation that lay providers who are trained and supervised should be able to deliver rapid diagnostic tests (RDTs). A lay provider is any person who performs functions relating to healthcare delivery and has been trained to deliver specific services but has received no formal professional or paraprofessional certificate or tertiary education degree. The introduction of HTS by lay providers will require several steps. Countries should review and revise national policies to:

- Permit trained lay providers to provide all testing services, including specimen collection, performing HIV rapid testing, interpreting test results and reporting the results, perform pre- and post-test counselling, link clients to prevention, treatment and care services.
- Acknowledge and adequately remunerate trained lay providers for performing HTS.
- Address the roles of trained lay providers in national policies and regulatory frameworks, such as human resource for health and HIV testing policies.

A simple approach to expanding community-based HTS is needed, particularly to reach higher risk populations who may not otherwise test for HIV and link to prevention, treatment and care.

Test for triage is an approach to support community-based HTS provided by lay providers. In this approach trained and supported lay providers conduct a single HIV RDT, and if this single RDT is reactive the client is promptly linked to a facility for further confirmatory testing where the validated national testing algorithm is performed. Individuals with a non-reactive test result are diagnosed HIV-negative, referred for and linked to appropriate HIV prevention services.

It was emphasized that test for triage can reduce the complexity of testing procedures for lay providers performing outreach testing or for home testing. Test for triage may be particularly suited for countries in WHO European Region that lack polices and infrastructure that enable lay providers or community-based organisations to perform HIV testing and report results. Dr Khotenashvili asked participants to express their opinion on these topics during the current session, or later at the working group sessions.

Panel discussion

- Early HIV diagnosis and better linkage to services: the approaches and best HTS practices from across the Region.
- Expanding community based HIV testing services: barriers and facilitators.
- Analysis of legislative and policy barriers for introduction and effective operation of community-based HIV testing and counselling in 7 countries of Eastern Europe and Central Asia.
- Expanding access to HTS for key populations and other vulnerable groups including PWIDs, MSM, SWs, migrants, and internally displaced people.
- Improving linkages to care.

Rebecca Perkins, (EVA, Russian Federation), Hovhannes Madoyan (ECUO/ Real World, Real People, Armenia), Natalia Podogova (IHRN), Iulia Godunova (EVA, Russian Federation)

Rebecca Perkins (EVA) presented a two year community based testing project that was conducted in Leningrad region and Saint Petersburg. It involved outreach to rock concerts, music festivals and events. Rapid testing was delivered with pre- and post-test counselling by peer counsellors who were either living with HIV or from one of the risk populations. The testing returned a positivity rate of 9% for women and 11% for men suggesting the strategy was appropriately targeted. The women that were tested were frequently from high risk populations,

particularly SWs, PWIDs and their partners and people with a low frequency of condom use. The women who were not members of these groups still returned a higher positivity rate than the general population. The project demonstrated that:

- Rapid testing of the population is effective in detecting cases of HIV infection, especially among vulnerable groups.
- An intersection of risk was seen, and the greatest prevalence of HIV infection was among women with combined risk factors.
- It is beneficial to target testing to the most at-risk groups: women of reproductive age with a history of drug use and/or possible sexual contact with PWIDs.
- A complex approach to finding and testing individuals is the most effective, given that women with combined risks are more vulnerable.
- Peer counsellors are a crucial component of the program to enable access to the most impacted communities.
- It is important that women continue to be encouraged to get tested, particularly if they are planning to become pregnant, to consider abortion or if they have STI or other reproductive health concerns.

Hovhannes Madoyan was representing **ECUO** (an advocacy, education and awareness raising organisation for PLHIV in Eastern and Central Europe) and the NGO **Real World, Real People, Armenia**. The ECUO conducted a review of legal barriers which impeded community based testing[7]. It involved seven countries and asked three key questions: What are the regulations impeding the introduction and expansion of community based HIV testing services? How well is privacy and confidentiality protected? And, how are the rights of PLHIV violated?

The findings showed that a medical licence was required to conduct testing in all countries. Countries did not differentiate legally between rapid testing and laboratory-based testing. Professionals are involved in the surveillance and investigation of HIV diagnoses though there is no procedure on how to enable a balance of protection of public health and protection of an individual's privacy. In all countries there are legal frameworks that result in discrimination for PLHIV, particularly for PWIDs and forced testing was particularly an issue. This and other human rights issues result in stigma and discrimination.

The review identified five best practices:

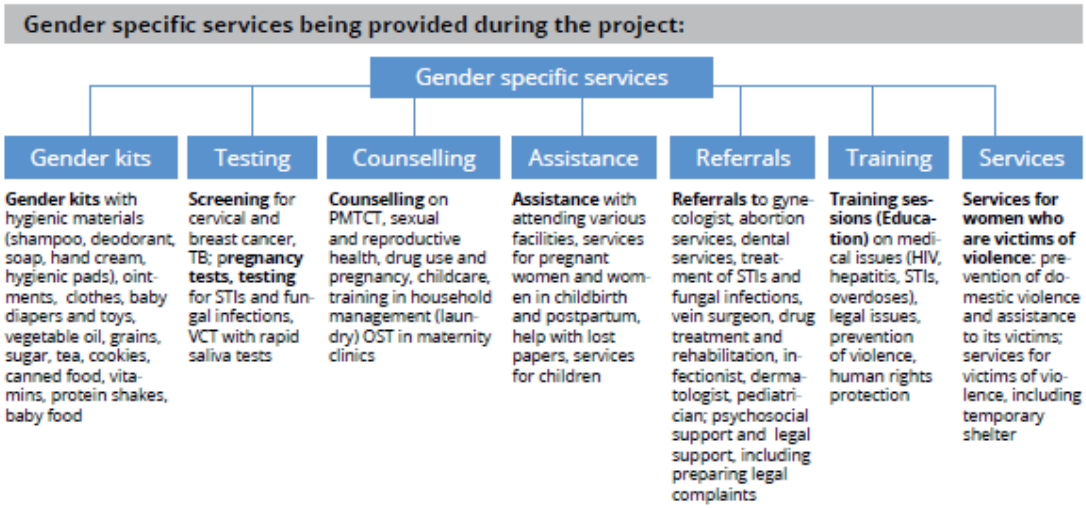
1. Testing should focus on the key populations as a strategy to get PLHIV on treatment.
2. Ensure effective communication with stakeholders and key populations.
3. Ensure economic efficiency in the delivery of services.
4. NGOs should be used to conduct testing irrespective of the legislative framework.
5. Create a supportive environment for key populations.

Natalia Podogova (EHRN) presented a project that aimed to build the capacity of NGOs to advocate and provide services to women who used drugs to increase their access to HIV

[7]The review is available via the ECUO website: http://ecuo.org/en/orc/video/2015/11/18/analysis-legislative-and-policy-barriers-introduction-and-effective-operation-community-based-hiv-testing-and-counseling-7-countries-eastern-europe-and-central-asia/

treatment services, including PMTCT. She stated that NGOs act as a bridge to reach women who use drugs, though they are currently financed by international organisations who are slowly defunding existing projects. Healthcare professionals struggle to provide services to this group of women, and in many countries OST services are prohibited and drug use is criminalised. This all contributes to this population group being highly stigmatized.
The project provided a range of gender-specific services to improve access to healthcare (see **Error! Reference source not found.** below).

Figure 2. Gender-specific services offered to improve access to healthcare for women who inject drugs



It also noted that improving the human rights context, including changing repressive drug policies enables women to access services. Ms Podogova stressed that increasing access to HTS should focus on key populations and this doesn't require additional funding, but rather the right allocation of the funding and appropriately targeted HTS strategies.

Iulia Godunova (EVA) presented a project which focused on improving the linkages to care after HIV testing. EVA delivered an outreach testing project which focused on high risk populations or people who engaged in behaviours which carried a high risk of HIV transmission. The project used mobile and stationary testing units and undertook pre-test counselling to evaluate the levels of risky behaviour. If the individual tested positive they were linked to a medical institution and if necessary provided with personalised support to get there. Approximately 6% of people tested returned a positive result.

The project faced financial and legal barriers, and blood tests cannot be conducted in Russia without a medical licence. However the project identified a much higher rate of positive cases than the general prevalence rate, suggesting it was an appropriately targeted testing strategy. Discussion after the presentations identified that in many of the countries there were movements towards expanding testing beyond the medical setting. Greece noted that once it changed its HTS strategy they diagnosed 30% more cases. Greece also highlighted the need to use and engage with the NGO sector. Greece also noted that each funding proposal should budget for confirmatory testing and linkage to care (including during the financial crisis).

Some countries challenged this assertion and felt that when medical personnel are not involved, testing projects are doomed to fail. They identified that without the involvement of medical professionals there are poorer linkages to care. Other countries disagreed and felt the context of HIV service delivery had changed. The involvement of non-medical professionals can be limited, such as through the use of a triage-style system.

Dr Khotenashvili reminded participants that 50% (in some countries up to 60%) of PLHIV in the Region are currently undiagnosed, despite the fact that the existing health systems are strong. She urged countries to look critically at their programs because their current HTS strategies are simply not working. The picture becomes bleaker again when treatment cascades are disaggregated on the basis of high risk populations (particularly for PWIDs). In some cases the money is being poorly allocated, an example of which is where some countries excessively test pregnant women though yield very few positive diagnoses while ignoring much larger groups of PLHIV.

Session 4: HIV testing strategies and quality assurance of HIV testing

WHO Consolidated Guidance: HIV testing strategies. Assuring the quality of HIV testing results

Co-chairs: Magnus Unemo (Sweden), Sören Andersson (Sweden)
Magnus Unemo (WHO Collaborating Centre, Sweden)

Magnus Unemo presented the WHO evidence-based HIV testing strategies for the diagnosis of HIV and the associated quality assurance processes. Professor Unemo noted that 67% of countries in the Region did not have full concordance with the WHO testing recommendations. Unfortunately there are many different algorithms which are currently being employed, which is resulting in unnecessarily high costs and in many cases a poorer positive predictive value. Appropriate quality assurance of a testing strategy involves choosing a testing strategy (which will depend on the prevalence of the testing setting), selecting appropriate products, validating the testing strategy and ensuring post-market surveillance of the products which are used.
A number of regional issues were specifically noted, including:

- The use of assays that are inconclusive if used during the window period, resulting in the need for retesting.
- The use of the same assays multiple times.
- Not using 4th generation tests (which have a higher level of specificity).
- The use of immunoblot tests despite a lack of capacity or reagents.

Professor Unemo commented that in his visits to countries, there has been little concern paid to the performance of tests. The sensitivity, specificity, negative and positive predictive values are not often considered. WHO has a prequalification assessment procedure which requires performance of at least 99% positive predictive value together with a very high level of sensitivity and specificity.
Quality assurance should be part of the ongoing HIV testing strategy. This should include internal and external quality assessments, as well as quality control involving the evaluation and validation of tests, internal quality control and equipment evaluation and monitoring.

Use of rapid diagnostic tests
Magdalini Pylli (Greece)

Magdalini Pylli presented on the use of rapid diagnostic tests (RDTs) in Greece. The basic principles of testing in Greece state it should be voluntary, confidential, anonymous, free, include pre and post-test counselling, and include timely and appropriate linkages to care. RDTs are not used in hospitals (with the exception of occupational exposure or for pregnant women) though they are used more commonly in community settings. The tests can be performed by qualified, trained healthcare professionals in NGOs or medical mobile units.
Community HIV testing using rapid tests was implemented by NGOs in the context of a pilot project. Feedback will now be sought from all stakeholders involved in order to amend the new guidance documents. This project will continue and focus on developing supporting processes and documentation. This will include updating the existing guidelines to develop standardised referral documents and enhanced collaboration with other organisation. The algorithm is also being piloted and will require evaluation and guidelines.

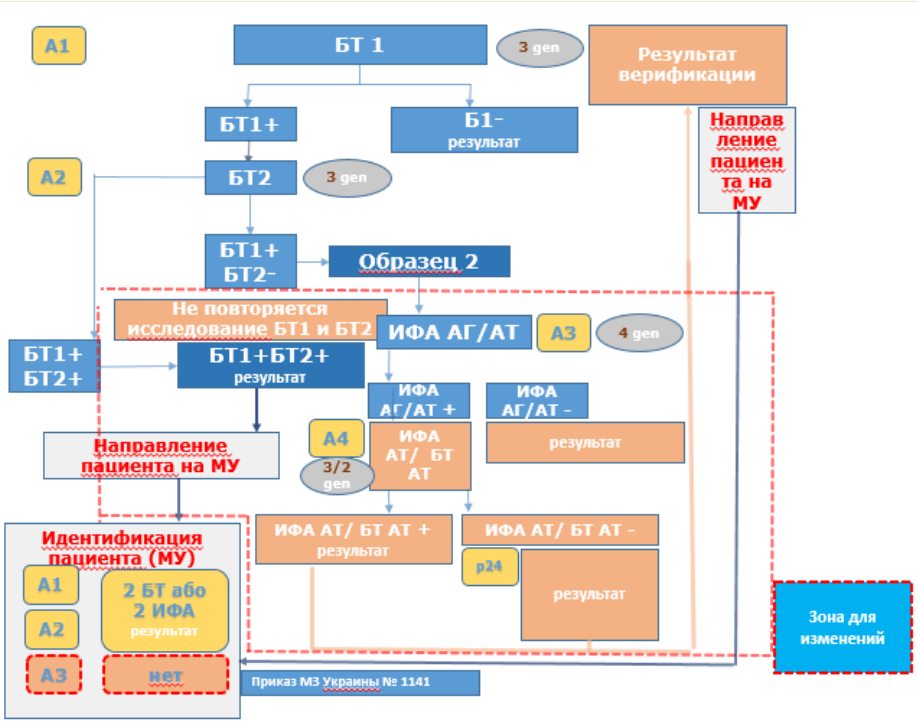
HIV testing algorithms
Irina Andrianova (Ukraine)

The treatment cascade suggests that in the Ukraine 62% of PLHIV know their status. The country conducts three million tests per annum. Of the total number of tests that are conducted, 47% are donors and pregnant women, 15% are from high risk populations and 42% are tested for other reasons (sometimes on the basis of clinical indications).

Across the country, there are 25 labs involved in confirmatory testing. RDTs are used in smaller healthcare institutions, and testing is still only conducted by medical professionals. All RDTs employed are 3rd generation tests. For screening the 3rd generation tests are used with exception of pregnant and blood donors for whom 4th generation tests are used.

The current algorithm is presented below in **Error! Reference source not found.**. A working group is currently being established to review the algorithm.

Figure 3. The current HIV testing algorithm employed in the Ukraine



Ukraine is introducing self-testing as “assisted self-testing”: when a client comes to an NGO the test is performed by a social worker. Blood tests are not widely acceptable to patients, so saliva tests have been used though this is problematic because they are more expensive. The RDT is used as a triage test, and a positive result will trigger a referral for follow up testing. However many (33.7%) people are lost to followup after RDTs are conducted.

Assuring the quality of HIV testing results. Quality management systems, irrespective of the testing setting

Danica Stanekova (Slovakia)

Quality assurance must be part of HIV testing, irrespective of the testing setting. It involves:

- Continuous education of staff providing testing services (including collection, storage and transport of samples and counselling services).
- Use of diagnostic kits and collection devices with recognised international certification.
- Screening testing of blood based on detection of HIV Ag/Ab in order to shorten the window period.
- Confirmation of all HIV reactive samples using Western Blot or PCR.
- Repeated testing of people with HIV-positive results.
- Pre- and post-test counselling.
- Laboratory’s that meet thresholds for good laboratory practices, including internal and external quality control.
- Good cooperation with other institutions involved in HIV testing and treatment.

HIV testing in Slovakia involves serological screening using 4th generation ELISA tests provided by microbiological laboratories. Repeatedly reactive samples are sent centrally to the national reference centre for confirmation. They are tested using ELISA 4th generation and Western Blot to distinguish between type one and two HIV.

All laboratories in Slovakia are accredited by SNAS, and external quality assurance of serological diagnostic is provided by Riqas/ Randox laboratories in London or Instand in Dusseldorf. External quality assurance of testing based of molecular biological methods is provided by QCMD in Glasgow.

Using new testing technologies: Home-sampling by post promoted via social media

Cary James (United Kingdom)

Cary James presented a trial of home testing that was conducted in the UK, where they are trying to increase the proportion of PLHIV who know their status from 83% to 90%. To undertake home testing as part of this trial, participants had to go to a webpage, order a test and which is then sent out via the post. Negative results are communicated by text message or a phone call, though if they are positive they are asked to come into the clinic for follow up.

Since the trial began in 2013, 28 000 orders have been received, 60% of which were returned. It was deemed to be highly acceptable, with 95% of individuals stating they would recommend the process, and 97% stating they would use it again. Around half of those who ordered a test did so because they didn't want to attend an STI clinic, either because the opening hours were inconvenient or the clinic was too far away. The demographic data shows that home testing tends to attract younger people, and people living in rural areas of the country. 33% of those participating had never tested before, though this was even higher with migrants. It appeared to attract people who were very fearful of testing.

The trial yielded a HIV positivity rate of 1.7% to 2.3%, and the cost was approximately 20GBP per test conducted.

Discussion after the presentation focused on the efficacy of the trial in different population groups. In particular, it was shown that black African men living in the UK were visiting the website, though ordering tests at a lower rate. The return rate was lower for migrants. This may point to the need for more reminders or follow up, though the researchers are currently exploring the idea of a questionnaire to find out why people didn't return the test.

It was also noted that as part of the trial a six monthly reminder could be sent to participants. Cary James noted that oral testing may be the future of self-testing though it is slightly more expensive.

Questions and discussion at the end of the session suggested that testing algorithms need revision and adjustment in many countries, and quality assurance does not exist or is in its formative stages. It was suggested that:

- Testing using accurate and quality assured diagnostic methods is essential to achieve second and third 90%.
- Quality assurance is essential, and laboratories should develop and use a set of indicators to monitor the quality of their laboratory tests. All laboratories should strive for improved quality and move towards accreditation.
- Countries should all follow the key steps of quality improvement: choose a testing strategy (dependent on high or low HIV prevalence), selecting appropriate products, validating the testing algorithm and undertaking post-market surveillance of the products used.
- Despite ideal tests and algorithms, unavoidable errors (false negative and false positive results) will occur. This reinforces the need to undertake appropriate quality assurance of testing in all settings.
- Use of rapid testing should be expanded.
- Home -sampling by post promoted via social media was identified as a promising innovation by some Western and Central European countries. However the majority of countries felt that it was currently unrealistic as a strategy, though it should be considered in the future.

Session 5: HIV testing in the context of surveillance; Monitoring and evaluation

Chair: Samvel Grigoryan (Armenia)

WHO Consolidated Guidance: Approaches for HIV testing in the context of surveillance

Jelena Barbaric (WHO Collaborating Centre for HIV Surveillance, Croatia)

In recent years there has been increasing pressure to scale up testing services, not least because of the move to "treatment as prevention". Case-based surveillance systems are very important for monitoring and evaluation. The HIV strategic information results chain relies heavily on the case-based system at every point in the cascade so it is critical that the information and data is accurate and reliable. It should include the:

- Reporting all new HIV diagnoses (including those diagnosed at death) to a designated central monitoring body.
- Clinical staging, demographic characteristics of the client, date and place of diagnosis, date and source of the report.
- Validated national testing algorithm for all HIV case reports and protocols detailing how and where to report a diagnosis, confidentiality and security of data.
- Removal of duplicate cases.

HTS indicators are more meaningful as measures of access and coverage if they count the number of individuals tested rather than the number of tests performed. However, counting unique individuals from programme data over the period of a year as well as across many sites is challenging. This can be achieved using unique identifiers if electronic systems are available or recording information about the patient prior to testing so retests can be counted.

There are a number of consistent measurement issues that arise in monitoring and evaluation systems. These include:

- Misclassification of test results (due to the quality of tests)
- Failure to aggregate HIV cases to the national level
- Double reporting
- The timeliness of reporting
- When disaggregation's are undertaken, the validity of data (particularly mode of transmission) and incomplete reports
- The migration of individuals (particularly in European countries)
- The completeness and accuracy of deaths data (including the underreporting of deaths due to HIV/AIDS)
- Difficulty linking HIV case reporting to mortality statistics.

Panel discussion

Monitoring the HIV epidemic: Late presentation, recent infections and the cascade of care

Eline Op de Coul (the Netherlands)

Eline Op de Coul delivered a presentation on monitoring the HIV epidemic with a particular focus on late presentations, recent infections and the cascade of care. In the Netherlands, there are approximately 1 000 diagnoses each year, 68% of which are in MSM. There has been an overall decline in the numbers of people diagnosed in all groups, and an improvement in the CD4 count at diagnosis (especially among MSM). Late presentations are significantly higher for heterosexual men, followed by heterosexual women and then MSM. The proportion of PLHIV presenting late remains too high and this is unlikely to improve without a dramatic increase in HIV testing and strategies to tackle stigma.

Data suggests that individuals who were detected with a recent infection possessed a number of characteristics. These included presenting at an STI clinic as a site for testing (particularly with gay men), a greater likelihood of having an STI in the past two years, and having multiple sex partners.

In the discussion subsequent to the presentation, the importance of STI clinics as a setting for screening was emphasised. Some participants noted that indicator conditions (such as skin conditions) for people presenting in STI clinics were a particularly important trigger for HIV testing. Lali Khotenashvili expressed a concern that the current data on STI infections in Eastern Europe didn't reflect the reality of the situation. Some countries (such as Tajikistan) are showing promising signs in developing strong collaborations with STI services.

HIV case reporting: Coding systems
Susan Cowan (Denmark)

Susan Cowan discussed the importance of case reporting systems as the backbone of the treatment cascade. She noted that the system is only as good as the effort invested in it, where it was a case of "garbage in, garbage out". The surveillance system in Denmark registers all HIV tests performed in all laboratories and receives the data for all new diagnoses. The system uses a unique identifier and isn't anonymous (though it used to be).

The system uses a multiple copy sheet which enables the tracking of missing data and avoidance of double reporting. If data is not received from any part of the care chain a follow up is conducted. Data completeness currently sits at 90%.

Partner notification occurs as part of the diagnostic process. Individuals who may have been exposed receive a letter that does not identify the PLHIV (with the exception of when the person is pregnant). Ms Cowan noted that people's concerns about anonymity have decreased over time, primarily due to the normalisation of the condition.

Denmark still faces a number of gaps in the surveillance data. These include incomplete reporting, the misclassification of mode of transmission, misclassification of country of transmission, and the misclassification of the time of infection.

An outline of the HIV surveillance system and testing challenges in Armenia
Samvel Grigoryan (Armenia)

In Armenia, there are currently approximately 3 800 PLHIV, and a prevalence rate of approximately 0.2%. Most people diagnosed in Armenia are heterosexual migrant workers. The most recent surveillance data suggests that there is a decreasing rate of HIV in all key populations. The major issue the country faces is the low proportion of PLHIV know their status: at the moment, this is only 40%.

The case reporting system is compliant with many WHO guidelines, including the need for people to receive their test results. Individual's data is included in the surveillance system though patient's confidentiality is still maintained.

Testing has been scaled up in the country consistently since 2004. This has been accompanied by an increase in the detection rate. However currently, health workers are at capacity and cannot undertake greater volumes of testing so new strategies must be developed. It is thought that the contribution of outreach projects has been negligible, and for this reason routine testing in other healthcare facilities is currently being investigated.

Sharing experience of community based testing (COBATEST) network: A review of the monitoring and evaluation indicators and data collection procedures

Nikos Dedes on behalf of Jordi Casabona (Greece)

Nikos Dedes presented the results of the community based testing network trial8. This was an EU funded project that focused on testing among MSM. It aimed to measure the cost effectiveness of HIV testing in six community based VCTs from six cities (Athens, Copenhagen, Lisbon, Ljubljana, Lyon, and Paris) and to compare the results across different settings. The costs were adjusted across the cities for purchasing power.

The number of tests per site ranged from 480 to 5 966, and prevalence rates from 0.8% in Lyon to 3.2% in Lisbon. Individuals who tested positive were personally escorted to treatment facilities. The costs per tests ranged from €41 in Athens to €256 in Ljubljana (some of the tests used in the latter location weren't RDTs, which explains the higher cost). This is highly cost effective, especially when compared to the financial cost of lost quality life adjusted years. The cost of outreach was much lower than on-site testing.

Nikos Dedes made a number of comments regarding the trial in response to questions from meeting participants. He noted that accreditation and training was a critical part of the scheme. He also noted that it was critical that the research was monitored from a single point with a clear quality assurance system attached.

Session 6 & 7: Working groups' session

Introduction: Silviu Ciobanu (WHO)
Co-chairs: Nurmat Atabekov (Uzbekistan) and Alexandr Kossukhin (UNFPA)

1. Each group to suggest 3-5 key actions to expand HTS towards achieving first "90" goal and improve linkages towards achieving second "90".

2. Each group to identify major steps for adaptation and implementation of new HTS guidelines and what assistance would be required?

In session 8 working groups shared views focusing on:

- The actions required to expand HTS services and linkages to care.
- The major steps required for the adaptation and implementation of the new WHO Consolidated HTS Guidelines.
- The assistance that would be required.

The Table 2 below summarizes the presentations given by the Working groups at the Session 8.

[8]More information on the trial can be found online at www.cobatest.org

Table 1. Reports from working groups sessions on HIV Testing Services.

Group	Actions to expand HTS/expand linkages	Major steps for adaptations and implementation of the WHO Consolidated HTS Guidelines	Assistance required

Group A: Global Fund, Serbia, Kazakhstan, WHO NPO, Romania, Bulgaria, Denmark, Greece, Georgia, Armenia	• Strategic information to mark baseline including:
	  • GIS mapping of epidemiological hot-spots
	  • Picture of the country epidemic
	  • Behavioral surveys
	  • Completeness of reporting
	  • Mapping of services available (testing sites etc.) to find where the limitations in the data are:
	  • Mobile units, GPs etc., private sites (do they report?)
	  • Positivity rate by testing site + by tested population
	  • Do negative tests get reported/number of tests as denominator
	  • Percentage who come back for test-result
	  • Is anonymous testing possible
	  • Knowledge of types and quality of test
	  • Mapping what risk-category and number of people tested at each site incl. repeat testing (not all countries has this info)
	• Disseminating knowledge to decision makers (ministries etc)
	• Disseminating knowledge of benefits of knowing HIV-status
	  • To risk groups, health care and general population
	• Variety of testing:
	  • Possibility for routine testing in selected health care settings where prevalence > 0.1% (not agreement)
	  • All patients be offered HIV-testing in STI clinics, hepatitis clinics etc.
	  • Community testing among marginalized populations
	  • The countries choose which populations are the critical ones (SW, undocumented migrants, PWIDs, MSM)
	  • Expand peer to peer activities.
		• Scale up the completeness of reporting
		• Cost of universal testing made known
		• Review national testing algorithms
		• Access to testing sites for marginalized populations (legal problem)
		• Use of rapid tests in more sites (4th generation)
		• Access to self-testing? (countries not all agree)
		  • Access through pharmacies (like pregnancy-testing)
		  • Hotline for counselling etc.
		• Find out reason why we don't find the marginalized populations (contacts-related prevention)
		• Shift national resources to replace donor money.
			• Help to change legislation to provide easy and legal access for vulnerable groups for testing and treatment (for some)
			• Help with funding and constructing solid reporting systems
			• Help with testing algorithms and procurement guidelines for rapid tests in more sites
			• Help with fighting stigma
			• Facilitate discussions of self-testing
			  • Gathering more evidence
			  • Pilot project
			• Help shift funding to more national money or finding new donors.

Group B: Slovakia, Croatia, Russia, Turkmenistan, Tajikistan, Estonia,	• Strategic structured planning based on national/local situational analysis
	  • Geographical, high prevalence "hot-spots"
	  • Key populations
	  • Key sites to expand testing (hospital outpatients for indicator conditions, etc)
		• Train doctors/ medical students to be culturally competent to work with key populations (MSM, IDU, etc) to provide "client friendly"/ non-stigmatising approach
		• Identify gaps which inhibit effective HIV testing implementation and produce action
			• Provide modelling tool to determine scale of testing needed to achieve 90% diagnosed
			• Provide quality data, especially on key populations, number of people living with HIV

Netherlands, UK, Poland, UNAIDS, EATG, THT, WHO	• Utilise available systems to expand testing • Positive messaging around testing disseminated via most impactful routes • Assess structural limitations (internet access, transport, etc) • Increase awareness/ access to Post Exposure Prophylaxis.	plan to address them • Map delivery approaches to adapt to legislation which limits testing options • Reduce time from test to delivery of results and lineage to HIV if positive. Provide guidelines around maximum time to deliver results/ first appointment. (use of technology/ cell phone).	• Document/disseminate effective models of testing methods (including limitations) • Templates/ practical tools for implementation of recommendations in guidelines • Information available online for the public (home tests, etc) • Guidance for pharmacists to support home testing (pre-test counselling, information leaflet, etc) • High level meeting on HIV prevention/ feedback to countries.
Group C: Kyrgyzstan, Lithuania, Moldova, Poland, Uzbekistan, Consultant (YK), EHRN, E.V.A., Network PLHIV UZB, UNAIDS, UNFPA, WHO NPO	• Expand testing through healthcare workers so that many types of physicians will offer HIV testing (• Train GPs to provide HIV testing when indicator conditions are a presenting complaint. • Ensure existence of low threshold services in health care settings and NGOs to offer a comprehensive package of services. with linkages to treatment and care, • Increase HIV testing in STI clinics. • Ensure partner testing occurs. • Promoting testing online and via the post with promotion via social media. • Offer testing kits through pharmacies. • Promote home testing options using blood based tests. • Promote rapid testing including those offered by NGOs within the national legal environment (with testing conducted in partnership arrangements).	• Review the legal framework to allow for many types of testing (including the barriers to self-testing, access to different tests, establishing a mechanism to allow for the use of blood tests, creating a regulatory framework for testing to occur via the mail, eliminating the requirement for mandatory pre- test counselling). • Establishing partnership and coordination between state and private sector, NGOs. • Resolve shortage issues for high quality RDTs. • Establish partnerships and coordination among the public and private sectors and NGOs. • Create friendly and accessible healthcare services. • Introduce HIV testing in curriculum for medical students and postgraduates.	• Increase the accessibility of the list of prequalified tests endorsed by WHO as it is difficult to find. • High-level advocacy (for funding, manuals, guidelines, training materials) to enable an expansion of HIV testing. • Develop WHO recommendations for the establishment of low threshold clinics at the country level (a consensus was not reached on this point).
D: Azerbaijan, Belarus, Turkmenistan, Ukraine, CA Network of Women LHIV, ECUO, Real World, Real People, UNICEF, WHO CC HR,	• Expand access to HIV testing by optimising the existing resources and better engaging NGOs: • Review the regulatory and legal framework, and establish criteria for licensing, certification, accreditation and training. • Evaluation of existing models of HTS delivery. • Establish indicators for assessing cost effectiveness, quality and monitoring and evaluation. • Develop an electronic database to ensure personal data protection and use GIS to map confirmed HIV diagnoses.	• Ensure observation of human rights in testing and prevent stigma and discrimination • Develop and improve integration and coordination between different areas of healthcare (including NGOs). • Revise and adapt existing testing algorithms to better match the epidemiological situation that exists in countries or regions to ensure a high quality diagnostic process. • Include and expand the application of rapid	• Technical assistance with developing educational materials (e.g. training materials, assessment tools). • Assistance with developing the monitoring and evaluation systems. • Ensure timely access to WHO and international organisations' resources in Russian. • Advocacy and support for country programs to increase access to testing

WHO NPO		tests for HIV diagnostics. • Ensure access to test kits of appropriate quality. • Develop and revise instruments for internal and external quality assurance systems. • Ensure access to treatment for all patients with known HIV diagnosis via improved planning, management and financing.	and treatment as prevention. • Provide opportunities to consult with international experts. • Implement regional consultations or technical meetings on a regular basis. • Initiate efforts to reduce the cost of testing, including a reduction in the price of the tests and reagents. WHO, UNAIDS and other NGOs should undertake advocacy on price reduction.

Discussions after the Working Group presentations were focused on the major challenges facing countries and assistance was requested. This included:

- Provision of technical assistance to support the development of HTS strategies, shifting service delivery and the democratisation of testing.
- Revision and adaptation of national HTS polices and their guidance documents.
- Methods to obtain support to implement new approaches and innovations.
- Promotion of HTS standards, reinforcing testing in specific clinical settings.
- Improving linkages to post-test services, particularly HIV care.
- Preventing misdiagnosis and improving the quality of testing.
- Optimising monitoring and evaluation including the evaluation of service linkages.

UNAIDS in particular noted the need to reduce the price of HIV tests and will provide assistance in this area.

Session 8: Ways forward

Co-chairs: Lali Khotenashvili (WHO), Marina Semenchenko (UNAIDS)

The Global Fund investment in EECA

Eileen Burke (The Global Fund)

Eileen Burke reviewed the epidemiological situation in the Region and the role of the Global Fund as a financing mechanism. The Global Fund is currently looking to invest for impact, with a particular focus on decentralised testing and treatment models, and also involvement of lay health providers.

There are a number of significant barriers to the achievement of the 90-90-90 targets in Europe. These include a limited adoption of some WHO Guidelines, complex and expensive diagnostic testing algorithms, excessive lag times between initial screening and the confirmatory diagnoses and the limited use of point-of-care diagnostics. There is a low level of capacity in some countries to perform laboratory diagnostics, legal, regulatory and health system barriers, and an over-reliance on donors to support domestic programs.

The Global Fund is facing a funding shortfall which impacts financing of country level initiatives. As the Global Fund projects cease, this is not always being met with an increase in domestic funding. Currently, it is projected there will be a $197 million funding shortfall for the 2015-2017 period.

The only way to maintain services is to improve allocative and technical efficiencies and reforming the delivery of services and their financing.

Panel discussion: Suggesting action points for WHO European Region countries to expand access to and coverage of HIV testing services

Samvel Grigoryan (Armenia), Tonka Varleva (Bulgaria), Nikos Dedes (EATG), Iulia Godunova (EVA, Russian Federation), Saulius Chaplinskas (Lithuania), Egor Serebriakov (Russian Federation), Elin Op de Coul (Netherlands), Anna Marzec-Boguslawska (Poland), Susan Cowan (Denmark), Violetta Martsinovska (Ukraine), Nurmat Atabekov (Uzbekistan), Ann Sullivan (United Kingdom)

The panel discussion expanded to include all meeting participants and evolved into a general discussion. This focused on a summary of the issues discussed at the meeting, the challenges and opportunities and that were identified, and some concluding action points and meeting recommendations.

Conclusions and recommendations

A number of important achievements were noted in the WHO European Region. These include the Region having the highest levels of early infant diagnosis and the highest rates of testing among pregnant women. The Region has also seen the successful expansion of quality assurance of laboratory services and significant improvements in the monitoring and evaluation of programs, particularly relating to pregnant women and children.

However countries in the Region face a number of challenges. Up to 50% of PLHIV in the European Region do not know their status. This is a particular issue for key populations such as people who inject drugs (PWIDs) in parts of Eastern Europe and Central Asia. A failure to diagnose PLHIV affects every step of the treatment cascade, where undiagnosed LHIV are unable to access relevant treatment and care for their condition.

A number of key conclusions and recommendations emerged from the meeting:

1. There was broad acknowledgement from all participants on the need to scale up testing in order to meet the first of the new global 90-90-90 targets.

2. The new WHO Consolidated HTS Guidelines are an important tool to guide countries in their efforts to expand HTS.

3. Countries require technical assistance for the adaptation and adoption of these Guidelines. This will focus on the revision, adaptation and adoption of national HTS polices, guidance documents and practices. The specific needs of countries are reflected in the outcomes of Working Group Session in Table 1.

4. Countries will require WHO assistance to make a strategic HTS choices, undertake fundamental shifts in services delivery and democratise testing. This will involve:
    - Revision, adaptation and adoption of national HTS polices and guidance documents.
    - Gaining acceptance, supporting implementation of new approaches and innovations.
    - Promoting HTS standards, reinforcing testing in specific clinical settings.
    - Improving linkages to posttest services, primarily care.
    - Preventing misdiagnosis, improving testing quality.

5. There is the ongoing need for high level advocacy in the Region to address the legal barriers that obstruct testing. This should focus on:
   - The demedicalisation of HIV testing.
   - Promoting HIV testing standards such as confidentiality and consent (including the need for minors to be able to give consent).
   - Promoting lay personnel involvement in HTS.
   - Addressing the cessation of the Global Fund financing in the Region and include advocacy for sustainable financing and an increase in domestic funding for HIV programs.

6. Reducing stigma and discrimination (particularly in healthcare settings) remains an important challenge for nation HIV programs. Countries requested support from the WHO in this area, and it was suggested that the immediate assistance could be offered by reinforcing the importance of confidentiality as one of "5Cs".

7. In a number of countries pregnant women are not universally tested for HIV because it is seen to be unnecessary. In some circumstances the reverse is true, and pregnant women are tested excessively. The testing of pregnant women should be dependent on the epidemiological situation in each country and countries need to consider the allocative efficiencies of their testing strategy as a whole.

8. The legal restrictions around age of consent creates a barrier for adolescents who wish to undertake HIV testing as by the law only those 18 years and older are eligible.

9. The availability of and access to rapid HIV testing should be expanded. Legal barriers should be removed and capacity building should be offered to ensure the delivery of high quality rapid testing.

10. The national testing algorithms should be revised and adjust in accordance with WHO recommendations. Quality assurance systems should be initiated or strengthened as required.

11. Monitoring and evaluation system should be strengthened and optimised, and include better provisions to track the effectiveness of service linkages.

12. There are issues centring on a lack of human resources (particularly in primary healthcare) which affect the quality of HTS. These include a low awareness level of awareness among GPs about the need to offer testing, and their reluctance to offer HTS. Policy makers must continue to engage with the primary healthcare sector to engage them in HTS.

13. A number of innovative projects were presented during the meeting that used online testing. These appeared to be a promising avenue to target high risk populations for HTS.

14. Countries should utilise the appropriate tools to scaleup testing and reach the first of the 90-90-90 targets. This may include disaggregation of the treatment cascade into key populations or by region to better understand the epidemic, the required testing and their costs.

15. Partnerships with NGOs should continue to be promoted. At points during the meeting the relationship with NGOs was couched as “us and them” and this should be avoided.

16. Testing is a gateway to all other elements of the response to HIV. This response should be multifocal and include condoms, PrEP and harm reduction services. If countries can set aside ethical, moral and political considerations there is no reason this is unachievable.

17. It is important to continue to promote low threshold services, irrespective of who delivers it however they must be truly accessible.

18. There is still poor uptake of testing recommendations and countries may require assistance to continue to support their rollout.

19. Countries should be encouraged to promote testing people presenting to healthcare facilities with indicator conditions.

Annex A

Country-level achievements, barriers and proposed actions

Table 2. Full details of country-level achievements, barriers and proposed actions to achieve a complete rollout of HTS

Country	Achievements	Barriers	Proposed actions
Armenia	• All blood agents and human products are tested for HIV. There has been no transmission from donors to recipients. • Over 95% of pregnant women are tested for HIV. There have been no cases of MTCT of HIV. • More than 95% patients with tuberculosis are tested for HIV. • Testing is available in all regions and is offered to migrants.	• A high rate of PLHIV are unregistered or undiagnosed. • 51% are diagnosed late (i.e. CD4 <350). • Outreach programs focus on key populations but have only yielded one diagnosis. • Given the funding mode anonymous free testing in primary health care settings is not possible yet. • There are limited funding opportunities to offer routine testing in healthcare settings and for migrants. • People do not request HIV testing or services. • There is limited access to testing, prevention and treatment for labor migrants in host countries	• HIV testing in healthcare facilities for partners of pregnant women (requires funding). • Offer termination of pregnancy for diagnosed women (requires funding). • Improve testing among migrants, particularly in the city (the rate is ok in regional areas). • Increase the motivation for testing in the general and key populations through general awareness raising campaigns. • Routinely offer HIV testing in healthcare settings (if additional funding is available.)
Uzbekistan	• The country has recently received a new grant from the Global Fund, with an additional 1.5 million allocated internally for testing • There are currently three types of testing: voluntary, obligatory and forced testing. Obligatory testing occurs in 15 centres for pregnant women, for people who are newly married, healthcare workers, children born to mothers LHIV, PWIDs, MSM and SWs. • Treatment will be offered irrespective of CD4 count, and ARVs will be offered for preventative purposes. • The country has developed national clinical protocols, with includes a specific component on preventing vertical transmission. • In May 2006 the country began providing ARVs to HIV-infected patients. • An AIDS Centre was established which provides 60 specialised beds and medical training on the prevention, diagnosis and care of HIV and AIDS.		
Azerbaijan	• The country is aiming for the 90-90-90 targets. • In 2015 there were 4,453 PLHIV that were diagnosed, who were predominantly men • The main mode of transmission was injecting drug use, then MSM, heterosexual transmission and then MTCT. • 74% of pregnant women are on treatment, and there was only one case of MTCT of HIV in 2014. • There is a national week dedicated to HIV testing in August. Information provision includes leaflets and banners which aim to improve the quality and accessibility services. • Stigma is a problem across healthcare settings: it is common and workers have fears about working with PLHIV. The country requires assistance with tackling stigma among healthcare workers.		

Ukraine	• There is a very clear policy of human rights protection, and testing is voluntary for Ukrainian and foreign citizens. • Testing follows the WHO-recommended algorithm. • Rapid testing has been used for high risk populations for more than 10 years. • Testing occurs at many levels within healthcare including among NGOs. • Mobile outpatient services are provided, including assisted self-testing. • Dried blood spots are used for the early diagnosis of HIV testing. • In 2015 an integration project was launched which investigates the integration of services to identify infections in multiple healthcare settings.	• Stigma is still an issue. • There is a high proportion of undiagnosed cases and AIDS cases at diagnosis. • Patients are lost between diagnosis and referral to facilities for treatment. • Access to services is complicated for MSM. • Humanitarian catastrophes and war has created barriers to effective service delivery. • A shortage of healthcare personnel limits the amount of testing that can be undertaken. • There is a lack of equality in service provision between the general population and those who are incarcerated. • Financial limitations, especially in light of the cessation of Global Fund funding in 2017. • Over 30% diagnosed PLHIV do not receive medical care. • ARV coverage is insufficient in risk populations, especially among MSM. • Patient confidentiality is problematic in public health facilities. • The current monitoring and evaluation system does not provide data at each stage of the cascade. There are insufficient laboratory indicators and indicators of patient satisfaction. • The monitoring system uses different case definitions, and cannot obtain reliable data on the number of people surveyed and who is a member of high-risk groups. • There is no mechanism for the exchange of data between the Government-controlled territories and the occupied regions in eastern Ukraine.	• Creating a unified national HIV testing strategy, taking into account the epidemiological situation and targeting key populations. • Provision of testing services for HIV in primary care and involving NGOs, mobile clinics, community care groups, assisted self-test (with additional funding). • Revision of HIV testing algorithms. • Creation of an effective referral system of people with diagnosed with HIV in hospitals, including the decentralisation and integration of services, social support, strengthening cooperation with NGOs. • Strengthening of programs to prevent HIV infection among the general population • Development/implementation of programs to improve the retention to HIV people in healthcare services. • Review of the clinical protocol for the prevention, diagnosis, treatment, care and support for PLHIV. • Creation of a single registration system to monitor people diagnosed with HIV. • Advocacy project approval by Cabinet of Ministers focused on establishing assistance for people living in the temporarily uncontrolled Donetsk and Lugansk regions. • Implementation of campaigns to improve the motivation for testing and stigma reduction among health care workers. • Identify funding mechanisms to sustain the Global Fund projects beyond 2017.
Belarus	• Testing occurs at many levels within the healthcare system, in both government and NGO settings to ensure testing is accessible. • Numerous types of testing are conducted including rapid testing with both saliva and blood. • People from high risk groups are able	• A long time lapses between screening and confirmation of the result, which leads to a loss of patients. • Currently rapid testing and NGO involvement in care isn't legally supported (though this is planned for in 2016).	• Amendment of the legislation to support rapid testing. • Huge participation of NGOs is planned, including engaging them more effectively. • Initiate manufacturing of rapid tests in Belarus to save money. • Change the legislative context and redistribute funding to prioritise at risk

	to access to HIV testing.		populations, particularly PWIDs.
United Kingdom	• 47% of HIV diagnoses occur outside of HIV testing services. • The home sampling strategy yields a 1.4% positivity rate. • Legislation was recently changed to allow home testing, which can be ordered online. • Implementation of the national HIV partner notification scheme. This yielded a 21% positivity rate.	• Coverage in genitourinary medical clinics is highly variable. It also varies significantly between different groups, where heterosexuals are more disadvantaged. • Expand HIV testing in high prevalence situations, particularly in non-traditional healthcare settings line with the National HIV Guidelines. • There is a concern that people with indicator conditions (i.e. conditions with an undiagnosed prevalence >1/1 000) are not offered HIV screening.	• Rollout of the national self-sampling/home sampling initiative, with the assistance of the local councils and Public Health England. • Update the National HIV Testing Guidelines, and consolidate a number of existing government and professional organisation's guidelines in the process.
Bulgaria	• A good supporting legal framework for reporting HIV infection, including STIs under the Communicable Disease Act. • In 2002 (updated 2012) methodological guidelines for counselling and testing in voluntary testing and counselling (VTC) centres were introduced. • Testing occurs in many settings in healthcare and community/mobile settings. • Rapid testing is available, and can be used in all settings (including mobile units). • Testing is free for all inhabitants. • 65% of new diagnoses occur among vulnerable groups.	• Strengthening leadership, coordination and partnership at the national and local level. • Quality assurance of systems for HIV/STI prevention treatment, care and support. • Human resources and capacity building of healthcare providers and NGOs • Strengthening and integrating monitoring and evaluation. • Improving the accessibility of services and community engagement in service delivery. • Ensuring sustainable financing, including: resource mobilisation strategies; equitable and efficient allocation of funds for HIV/AIDS prevention and control; engagement of the Government, private sector, local and international donors	• Universal testing of pregnant women. • Offering of routine free of charge testing to PWIDs, patients with tuberculosis, STIs, prisoners, migrants and mobile population, partners of PLHIV. • Introduction of partner tracing and notification. • Training of health professionals for early diagnosis of HIV infection.
Turkmenistan	• With the introduction of the state health program the quality and efficiency of healthcare services has improved dramatically. • HIV is a health priority and is governed by numerous laws and the national HIV programs. • The HIV program is implemented by an interdepartmental committee though coordinated by the Ministry of Health and supported by a range of international NGOs. • The programme is carried out across all regions of the country. • The programme focuses on information dissemination with a particular focus on young people and HIV prevention, access to testing, and how to treat if a person is diagnosed as positive. • Testing can be provided anonymously and free of charge (with the exception of foreigners). • Obligatory testing of blood donors, tissues, or particular medical indications or for pregnant women. • 4^{th} generation tests are used • Clinical protocols were develop which focus on PEP and PReP and PMTCT.		• Modernisation of a network of laboratories for the diagnosis of HIV. This will include improving equipment, better compliance, and improved test algorithms. • Improve the flow of the epidemiological surveillance system for HIV. • Ensure control of the epidemic at its current levels.

Croatia	• Implementation of the GF project "Scaling up the HIV/AIDS response" resulted in increased access to testing. • Sustainable financing of the HIV response after cessation GF funding ended • Free and anonymous testing at 10 HTC centres: all for at risk pops and includes referral to ARV therapy and care. • Development of the health system, which expanded to community testing, rapid testing, and increased rate of HIV testing among MSM. • Improving legal protections for PLHIV, including antidiscrimination law, labour legislation and criminalisation of HIV transmission.	• Perception of low risk leads to lower levels of testing among MSM. • Oral rapid tests are expensive. A larger range of tests are required (currently only two are available). • Legal restrictions around sex workers makes them hard to access. • Stigma and discrimination leads to low rates of HIV testing. • Increase HIV testing uptake among MSM and increase the no of tests among MSM (there are many late diagnoses).	• Maintain political will to sustain programs and try to increase funding. • Continue with the work of HTC centres including strengthening of community based HIV testing with key populations. • Increase uptake of testing for key populations. • Intensify health promotion and HIV testing with MSM. Emphasise the importance/benefits of regular testing and the high rate of undiagnosed PLHIV. • Intensify youth sexual health education. • Undertake anti-stigma campaigns. • To continue with biobehavioral studies, including: research to better understand non-testing patterns and low risk perception, improving data quality, a detailed analysis of trends, continuum of care and risks, and STI surveys.
Tajikistan	• National program on the control of HIV/AIDS 2011-2015, the procedure for examination and testing, and the ordinance of the MoH. • National protocol for HIV treatment and care is in line with WHO recommendations. • Protocol on transmission of MTCT has been amended. • There has been an annual increase in testing and the proportion/number of women tested. • Development of an algorithm of testing for pregnant women (once for all women, twice for those at risk). • Provision of infant formula for babies born to women LHIV. • Provision of ARVs to PMTCT of HIV for pregnant women. • Development of the dried blood spot protocol for the diagnosis of newborns born to mothers living with HIV. • 100% of medical professionals have received training in HIV. • Transmission has decreased from women who know their status. • The use of rapid tests is underway (funded by the GF). • Healthcare capacity building and ensuring patients are not lost to the system is important.		• Expand ANC to offer a full package of services (family planning, contraception, etc.). • Strengthen HTS in primary healthcare. • Strengthen the delivery of primary healthcare for children living with HIV. • The increase in the state budget for EMTCT for pregnant women. • Expanding outreach and social work.
Denmark	• 2013 Guidelines on HIV Testing, moved the focus away from HIV as a deadly disease and normalized which led to an increase in GPs testing. It also decreased the focus on pretest counselling. • Free testing is offered in all healthcare	• The low threshold to entry is still too high for most vulnerable groups. • GPs need knowledge, training, and policy makers must continue to generate interest. • MSM are tested though not with sufficient regularity.	• Initiate home-based testing. • Disseminate free oral tests. • Generate additional financing.

	facilities. • NGO testing with non-medical staff is offered in all large cities. • Strong focus on MSM, migrants, SWs. • Rapid testing ensures people are not lost to follow up. People are also personally guided from testing to treatment.		
Estonia	• New testing guidelines were developed in 2012 which encourage a decentralisation of testing. • Rapid testing available in anonymous HIV counselling and testing sites and youth counselling centers. • In all key populations the rates of testing are increasing. • In some regions up to 90% of HIV-infected people who inject drugs know their status. Knowledge of HIV-status is much lower among other vulnerable groups.	• Main barriers among vulnerable populations are related to low risk perception and knowledge. • Low knowledge of testing recommendations and stigma among health care workers. • Budget limitations, especially in primary care.	• Information and training for healthcare professionals. • Refining the targeting of testing, particularly the testing of vulnerable populations.
Slovakia	• 400 MSM were tested in 2014. • Mandatory testing of blood donors, sperm, tissue, organ and milk donors. • From 1991 there was mandatory testing of pregnant women. • VCT for HIV testing is offered and is free. • In microbiological laboratories and infectious clinics people are now offered HIV tests on an 'opt-in' basis (though it is 'opt-out' in most other situations). • Anonymous HIV testing is provided in NRC for HIV/AIDS in Bratislava and in a few other publically funded services. • Community based testing occurs with SWs and PWIDs using rapid tests. The barrier to further rollout is the budget. • Due to the covert discrimination of PLHIV only a few, very small self-help groups exist in some NGOs that work with other groups of people engaging in high risk behaviours.		• Upgrade Expert Guidelines for the provision of HIV prevention in Slovakia. • Increase HIV testing, especially in populations at high risk. • Support community based testing in NGOs working with high risk groups. • Engage more organisations in HIV/HBV testing week.
Georgia	• 5000 cases registered in the country. • Overall, there is an increase in the rate of transmission. The rate among PWID decreases though heterosexual and MSM HIV transmission are the most common. • Universal access to VCT and ARV treatment since 2004, Recently this is	• Cascade of care shows people are retained after diagnosis though there is a major gap in those diagnosed. Around 50% are undiagnosed. • Prevalence increased by 20%, it is a concentrated epidemic mainly driven by MSM. • Only 25% of some high risk populations are diagnosed. • Many are diagnosed late with CD4 <200	• Achieve the 90-90-90 goals. • Hepatitis C elimination program launched in Georgia.

	offered regardless of the CD4 count.		
Serbia	• Two five-year HIV strategies have been developed since 2005 • Increased existing VCT sites to 26 in all regional institutes of public health and in some other health institutions. • Hepatitis treatment and testing is available. • Testing of pregnant women has been provided. • VCT is offered for people who are incarcerated. • Rapid testing has been offered since 2008. • Providers initiate treatment for PLHIV who have TB. • Capacity building of service providers in health facilities (TB and ANC) and from NGOs. • Improved integration of services via provider initiated testing for TB patients and TB screening among PWIDs, SWs and OST recipients.	• Surveys among general population and among key populations shows low level of knowledge, high rates of risky sexual practices and low perceptions of risk. • Surveys among healthcare workers shows insufficient knowledge, low levels of routine protection in workplaces and high levels of stigma and discrimination related to PLHIV. • Financial barriers to HBV, HCV and STI testing in VCT centers. • No sustainable mechanism in place for HIV testing services wishing to use rapid tests. • High level of stigma and discrimination in the general population. • Health care providers are reluctant to offer HIV testing. • Low level of HIV testing and retesting among MSM, PWID and SWs.	• Reduction of stigma and discrimination related to HIV. • Revision of current legislation on communicable diseases and better reporting in line with bylaws. • Development of new National Strategic Plan (2016-2020) with a focus on tailored HIV testing services for key populations in multiple settings. • Increasing access to and uptake of HIV testing services those who are undiagnosed and at greatest risk (MSM, PWIDs, SWs). • Scaling up outreach of voluntary confidential/anonymous counselling and testing for HIV using rapid tests. This may include a provision for non-medical staff to conduct testing. • Greater integration of HIV testing services with other services (HBV and HCV testing, OST centres, screening and testing for STIs, TB treatment). • Scaling-up implementation of antenatal VCT of pregnant women based on “opt -out” strategy (financial and human resources) • Continuous education, training of service providers from different sectors.
Greece	• Finalised the national guidance on HIV testing in 2014 which consolidated a number of guidance documents into one for healthcare professionals/individuals • Developed and standardised referral documents for the use of biological samples and informed consent or PLHIV. • Developed brief information leaflet on HIV testing (online and in all HTS). • Improvements to the monitoring and evaluation system including mapping HTS sites, the type of screening tests (3rd or 4th generation), and improved documentation of the number of	• The cost of the initial screening test. Until 2011 HIV test was provided for free in all public hospitals and AIDS reference and control centres (by law). Beginning in 2011 the initial screening test was charged. As time progressed and due to the deepening financial crisis the managers of the hospital adopted the aforementioned practice. For all insured individuals testing is free and is covered by health insurance. For uninsured individuals (in the majority of public hospitals) testing is free and is covered by the budget of the hospitals. In AIDS reference and control centres HIV testing is still free for all individuals. • There has been a dramatic reduction of the budget received for HIV which affects the ability to use	• Update testing guidelines in 2016. • Awareness raising campaign for healthcare workers to encourage them to use the monitoring system. • Identify new sources of funding to cover HIV testing and try to ensure the current budget • HIV testing and health promotion initiatives in the community settings will be evaluated. • Promoting HIV testing activities should include budget for further confirmation and linkage to care.

	individuals who have received their HIV test results.	confirmatory assays. • There is a lack of human resources, so it is hard to collect data for the monitoring system. There are also difficulties with low awareness of health care professionals regarding specific issues relating to HIV testing (especially in rural areas). • General lack of human resources.	
Russian Federation	• HIV testing is available in all healthcare facilities. • Coverage is approximately 20% of the general population. • The legislation allows testing that is voluntary, confidential and anonymous (if desired). • Free HIV testing can take place in any public health organisation. • Voluntary HIV testing is included in the standard of care for many diseases.	• The need for greater involvement to survey HIV middle-aged. • Lack of coordination of the activities of a number of NGOs and regional executive authorities.	• Expanded coverage of active screening for HIV in the worst affected regions. • Expanded coverage of screening for HIV risk groups. • Ministry of Health declared that there would be a testing day two times per year. It is hoped that this will lead to greater awareness in the general population about HIV.
Kazakhstan	• Pregnant women are diagnosed using rapid tests. • In 2015 the HIV testing Guidelines were updated to include anonymous testing. • Coverage is more than 10% of the total population each year. Diagnosis is about 9.9% • Priority populations include pregnant women. Diagnosis occurs at 14 weeks and treatment is initiated.		• Expanding access to rapid tests via home testing and distributing via pharmacies. • Improve the accessibility of voluntary counselling and testing. • Improving testing coverage in risk populations.
Poland	• The National AIDS Centre works with a multi-sectoral mandate. • There is one monitoring and evaluation system at the national level. • The program possesses sustainable financing managed by the minister of Health. • Wide availability/accessibility of HIV tests via a well-functioning network of 30 VCTs. • Well-functioning programs that address women at reproductive age and their gynaecologists. • Strong partnership between health authorities and civil society exists to build public awareness about HIV. • National recommendations on HIV/AIDS	• Inadequate research on STIs and hepatitis. • Limited national data on HIV/AIDS and STIs. • Limited access to low-budget venereology clinics. • By the law only those 18 years and older are eligible for HIV testing. • Limited access of rapid HIV testing. • Testing for HIV is not integrated with testing for STIs and hepatitis (due to legislative issues).	• Continue to open and develop VCT centres. • Strengthening the “linkages to care”, particularly for STIs. • Development of testing capacity (increase working hours, and number of consultants in VCTs) which requires additional funding. • Securing organisational financing for the new HIV strategy. • Targeted communication towards key populations.

	expanded and updated annually. • HIV testing includes pre- and -post test counselling, linkage to care and immediate access to treatment.		
Kyrgyzstan	• The number of tests being undertaken has increased, and so too has the number of HIV diagnoses. • Vertical transmission has been decreasing. • Coverage of testing for TB patients, SWs, and MSM has been increasing thought rate among MSM is still very low.	• Use 4th generation of tests. • Optimising the testing algorithm. • Reducing testing time from six to one or two weeks. • Reducing the time between diagnosis and treatment initiation. • Improving early diagnosis of babies born from infected mothers. • Limited capacity to carry out pre-test counselling • A lack of lab accreditation.	• Improve the transport system for blood products to the laboratory. • Planning to open a PCR laboratory in another region. • A greater focus on key populations. • Undertake the mentoring program offered by WHO.
Latvia	• The rights of PLHIV is determined by legislative acts. • Network of HIV prevention points (18 sites in 16 cites) where they also provide needle exchange and anonymous testing. • Pilot project on in testing key population (MSM and SWs) using mobile outreach methods.	• Number of HIV prevention points is limited and depends on the involvement of municipalities. • The low uptake of testing for risk populations (SWs and MSM) and the limited those in prison. • Free of charge HIV laboratory testing is available only with referrals to specialists and with the approval of the NHS. • Latvians don't know where to go for testing. • Private health services charge for testing while other service points offer free tests.	• Change the current system of financing of healthcare services to ensure direct access to HIV laboratory tests for persons with rapid tests. • Expand the network of HIV prevention points and mobile services for risk populations to ensure the availability of HIV testing where risk populations are located. • Ensure permanent services for SWs and MSM.
Netherlands	• We see a decline in HIV diagnoses, predominantly among MSM. This is linked to an increase in HIV testing. • Online testing offered for risk populations. • A good system of partner notification and a website with anonymous partner notification. • Improved linked to care, where PLHIV are treated immediately regardless of CD4 count. • New treatment for hepatitis C available. • Campaign "Out of the closet with HIV" and about the symptoms of acute HIV. • No cases among PWIDs last year.	• Still substantial proportions of late presentations. • Difficult to get GPs to undertake testing and will still only test risk populations. • Stigma is still an issue. • It is a struggle to reach heterosexual men and migrant populations with undiagnosed HIV.	• Continue to enhance HIV testing to reduce the rate of undiagnosed PLHIV and late presenters. • Special training for GPs to increase a proactive approach to testing. • Support efforts to diminish HIV related stigma • PrEP trial among MSM in Amsterdam and support efforts to assess the need/costs of broader implementation of PrEP • Social network testing of MSM is a possibility.
Lithuania	• Free of charge testing is offered or	• Insufficient access to free of charge testing for high risk	• To increase a number of rapid HIV tests not less

	certain subpopulations (people with TB, pregnant women, PWIDs/those on OST, prisoners). • The number of testing sites have increased annually. • The rate of HIV tests per 100,000 has increased annually. • HIV testing has increased among key populations in the past five years. • Increased of PWIDs have received a HIV test in the past 12 months.	groups such as MSM, CSW. • A lack of HIV testing in STI clinics and general practice.	than 3-4% and evaluated every two years. • To keep HIV testing coverage among pregnant women by 90-92%. • The epidemic can only be tackled by behavioural, treatment, screening altogether to stop transmission.
Moldova	• HIV testing is offered free of charge • Testing is conducted using informed consent. Forced testing is not allowed. • Rapid testing using saliva is used to screening high risk groups. • In medical facilities HCW recommend based on clinical criteria. • Use of rapid tests for women whose HIV status is unknown if pregnant. • NGOs can test key populations. • A non-discriminatory framework allows for anonymous, voluntary, free of charge testing irrespective of insurance status,	• About 50% of PLHIV are undiagnosed. • People are infrequently diagnosed on the basis of clinical symptoms. • Around 50% diagnosed are diagnosed late. • There is a low rate of testing in risk populations. • The validation of test results is very complicated.	• Deploying new testing practices including mobile units through NGOs using rapid testing. • Revise the HIV testing algorithm. • Introduce rapid testing in general practice, particularly in rural areas. • Improve the legal basis to distribute tests through pharmacies.

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