MEETING REPORT

OPTIMISING ANALYSIS OF THE HIV CONTINUUM OF CARE IN EUROPE

8-9 September 2015

Introduction

Since the HIV continuum of care (also referred to as the HIV treatment cascade) was first described in the United States in 2011, there has been a growing interest in use of this tool. It can be used to monitor the quality of HIV care for people living with HIV (PLHIV) and to assess the extent to which viral suppression is occurring at population level and contributing to efforts to reduce further HIV transmission. Although a number of European countries have been in a position to compile and report their HIV continuum of care data, attempts to compare and aggregate data across countries have been limited by different approaches to data collection, a lack of standard definitions for the elements of the continuum and significant gaps in data in many countries.

To consider how best to tackle these issues, the European Centre for Disease Prevention and Control (ECDC) held a meeting in Stockholm on 8-9 September 2015 (see agenda in **Annex 1**). Participants (see **Annex 2**) included surveillance, public health and research experts, HIV cohort leads and representatives from EU-funded projects, international agencies and civil society. This report summarises the main issues and action points arising from the meeting. (Presentations have been made available separately to participants.) Following a welcome and introductions, Andrew Amato (ECDC) summarised the main objectives of the meeting. These were to:

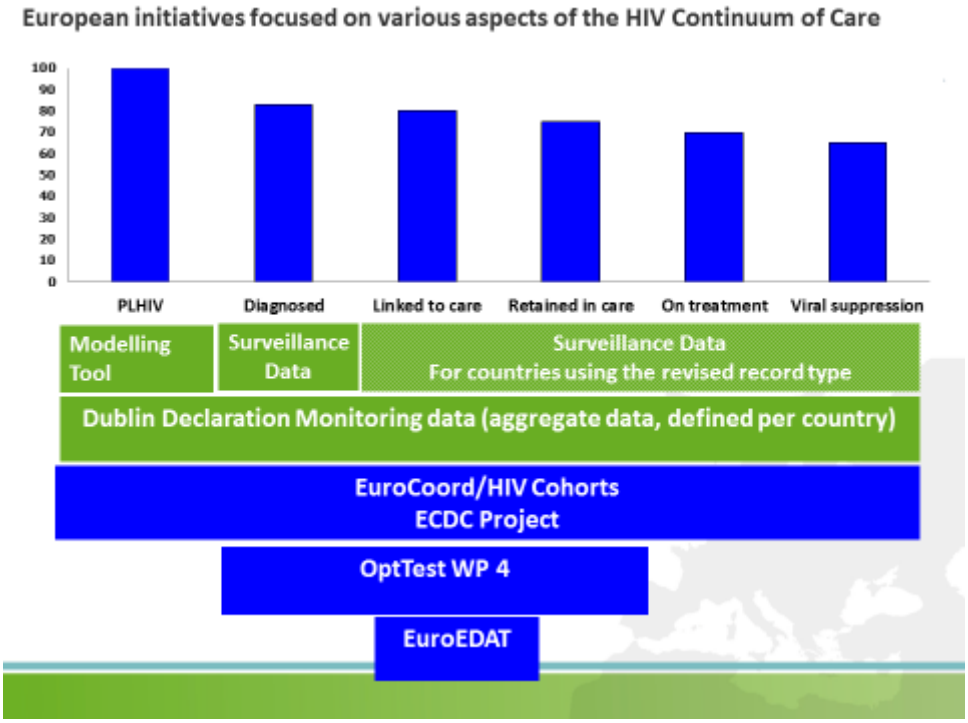
- Share experiences and challenges in measuring the HIV continuum of care in Europe.
- Promote discussion and exchange between national HIV surveillance experts and cohorts concerning continuum of care data sources and measurement.
- Identify opportunities for advancing the standardisation of continuum definitions and data sources.

The introductory session provided an overview of ECDC projects and data sources related to the continuum of care and of other European and global initiatives. Anastasia Pharris (ECDC) started by presenting a brief summary of ECDC activities relating to the continuum of care (see figure below). These include monitoring the epidemic and the response, through HIV/AIDS surveillance, which is conducted annually with WHO Europe, and Dublin Declaration monitoring, which is conducted every two years. The dataset for HIV/AIDS surveillance was revised in 2015; it now links

HIV and AIDS data and includes optional variables (e.g. first CD4 count and date, treatment, last attendance date, last viral load date, AIDS diagnosis, death cause and date) that can be used to construct a continuum of care. The most recent round of Dublin monitoring included questions on which elements of the continuum countries have data for and how these elements are defined.

Estimating the number of PLHIV, and the proportion of PLHIV who are diagnosed and undiagnosed, is a challenge. Many European countries have experienced problems with estimation using existing methods e.g. Spectrum, so ECDC has supported the development of the ECDC HIV Modelling Tool. This tool aims to enable countries to use existing data to estimate HIV prevalence, HIV incidence, the time between infection and diagnosis and the size of the undiagnosed fraction. The tool was launched on 7th September 2015 and ECDC is organising training for all EU countries. As the tool and the related trainings address the first two elements of the continuum, the main focus of this meeting was on the third, fourth, fifth and sixth elements, i.e. linked to care, retained in care, on treatment, and viral suppression.

ECDC is also implementing a new project with EuroCoord which aims to improve continuum of care estimates and explore the potential for further projects as well as synergies with European projects including OptTest and Euro HIVEDAT (see below).



This was followed by short presentations about three European projects that are relevant for monitoring the continuum of care.

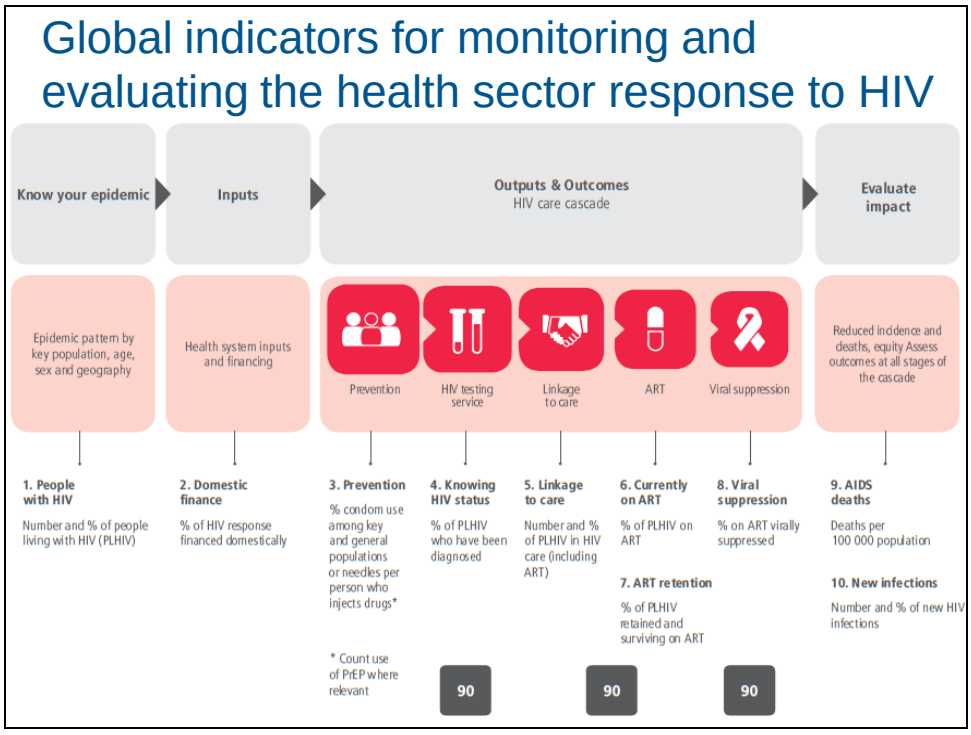
Dorthe Raben provided an overview of the OptTEST project run by HIV in Europe (HiE) and funded by the European Commission. This aims to develop strategies to improve early diagnosis and promote timely treatment and care for PLHIV. The project has seven work packages (WP). Outcomes include tools for implementing indicator condition guided HIV testing, measuring cost-effectiveness of testing strategies, analysing legal and regulatory barriers to testing uptake and approved and tested definitions for linkage to care.

Those most directly related to the continuum of care include WP 4 on linkage to and retention in care and WP 5 on indicator condition guided HIV testing, which is being piloted for three conditions in seven countries.

Jordi Casabona described the EuroEDAT project, which also aims to promote earlier HIV diagnosis and treatment, through improving understanding of the role and impact of community-based voluntary counselling and testing services and use of innovative strategies to increase early diagnosis and treatment among the most vulnerable populations such as men who have sex with men (MSM) and migrants. Issues being addressed by the project include the determinants of HIV test seeking behaviour, testing patterns, barriers to testing and the acceptability and feasibility of strategies to increase HIV testing. Key outputs will include a practical guide on optimising linkage to care for MSM and a toolkit on implementing community-based counselling and testing services for this population.

Kholoud Porter summarised the new ECDC/EuroCoord project, which aims to describe the continuum in ten EU countries (Austria, Denmark, France, Germany, Greece, Italy, Netherlands, Spain, Sweden and the UK) using standardised methods, through collaboration between national surveillance and cohort leads. The project could possibly include other countries that have national cohorts. ECDC plans to establish an advisory group for this project. The aim is to bring together surveillance and clinical data and, specifically, to generate information by March 2016 to inform the next round of Dublin Declaration reporting.

Annemarie Stengaard (WHO Europe) updated participants on the latest WHO consolidated guidelines for monitoring the HIV continuum of care in the health sector, which prioritise indicators for global and national monitoring and aims to support countries select and prioritize indicators, consolidate cascade measures, link services to outcomes to better assess impact, and strengthen analysis to identify bottlenecks and improve services along the cascade. The guidelines include ten core global indicators (see figure below) and 50 optional national indicators. WHO is placing particular emphasis on improving disaggregation of data for core indicators (e.g. by age, sex, key population and geographic location) and on individual case-based surveillance data (to enable tracking of individuals using a cohort approach along the continuum and construction of continuum measures for key populations, although this is challenging for many countries globally and requires linkages between epidemiological and clinical databases using unique identifiers). Next steps include dissemination of the guidelines and provision of technical support to countries including for investment in strategic information systems.



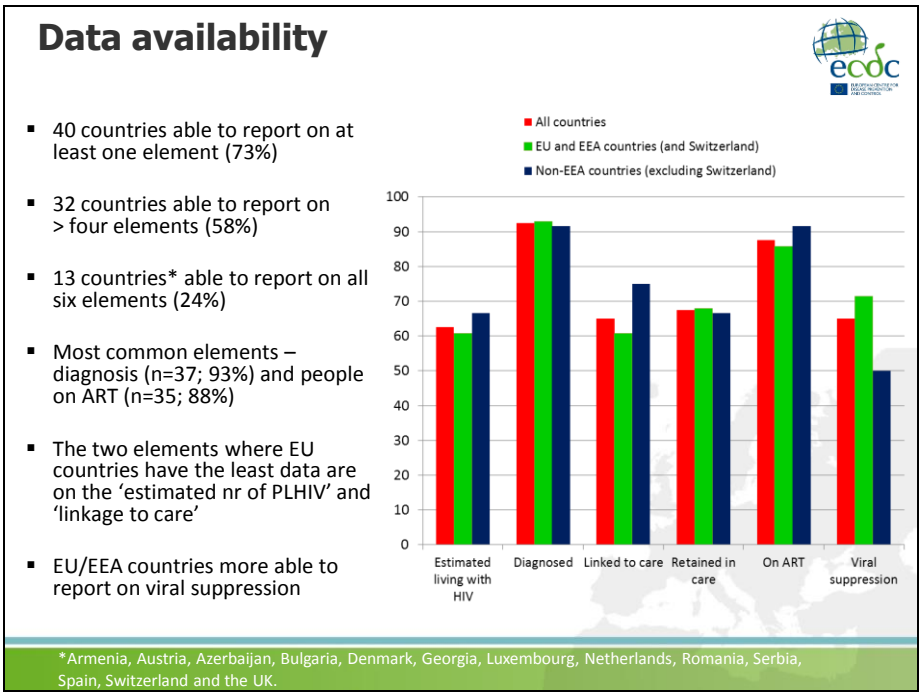
Key points raised in the subsequent discussion included:

- The importance of alignment between the SDGs, UNAIDS indicators and WHO indicators.
- The need to be clear about the overall purpose of monitoring the continuum and to assess the value of indicators in measuring the desired outcomes.

European experiences and challenges with the continuum of care

Teymur Noori (ECDC) and Roger Drew (ECDC consultant) presented a summary of data on the continuum of care reported by countries in the European region for Dublin Declaration monitoring in 2014; this generated a considerable amount of data, which ECDC has used as the basis for a special report on the continuum of care. Key findings were:

- Data availability – As the figure below shows, only 13 countries were able to report on all six elements of the continuum. The two elements where most countries have data are diagnosis and people on ART. A key issue is being able to access and link data sources i.e. national databases for diagnoses and for care of PLHIV. In many countries surveillance and clinical data are separate; the new ECDC EuroCoord project aims to address this.



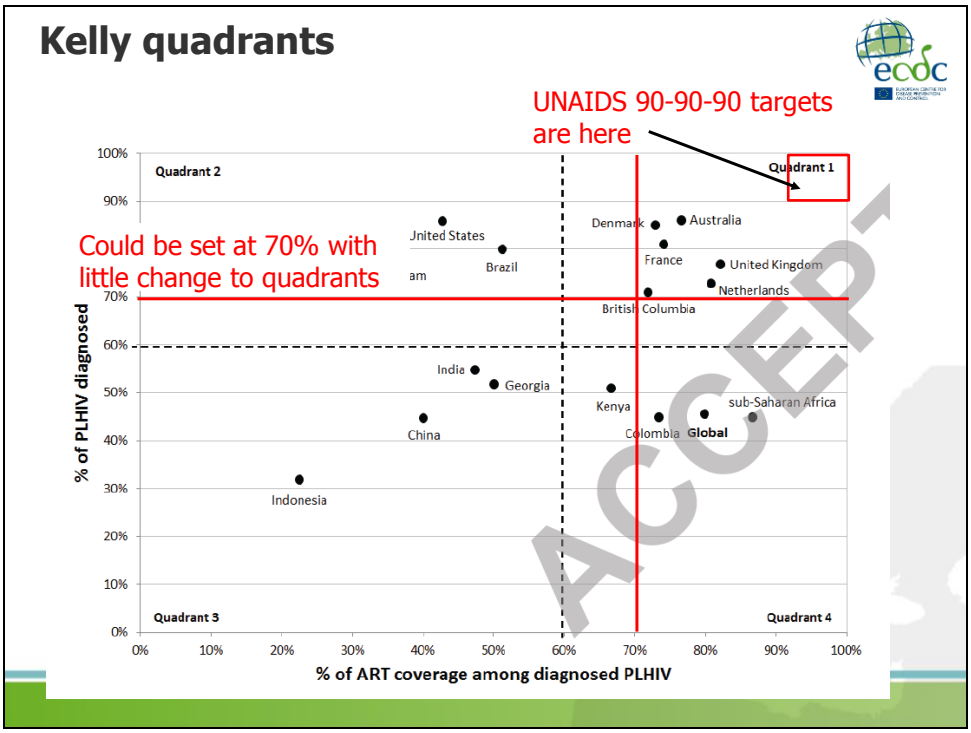
- Approach to data collection – Countries use three approaches: population based (cumulative); population based (annual); and cohort. In some cases it is not clear which approach has been used, in others data is drawn from different sources for different elements of the continuum.

- Definitions – Countries also use a range of definitions for the elements of the continuum (see table below). A continuum with four elements may be most feasible for Europe as it will be difficult to establish common definitions of 'linked to care' and 'retained in care.'

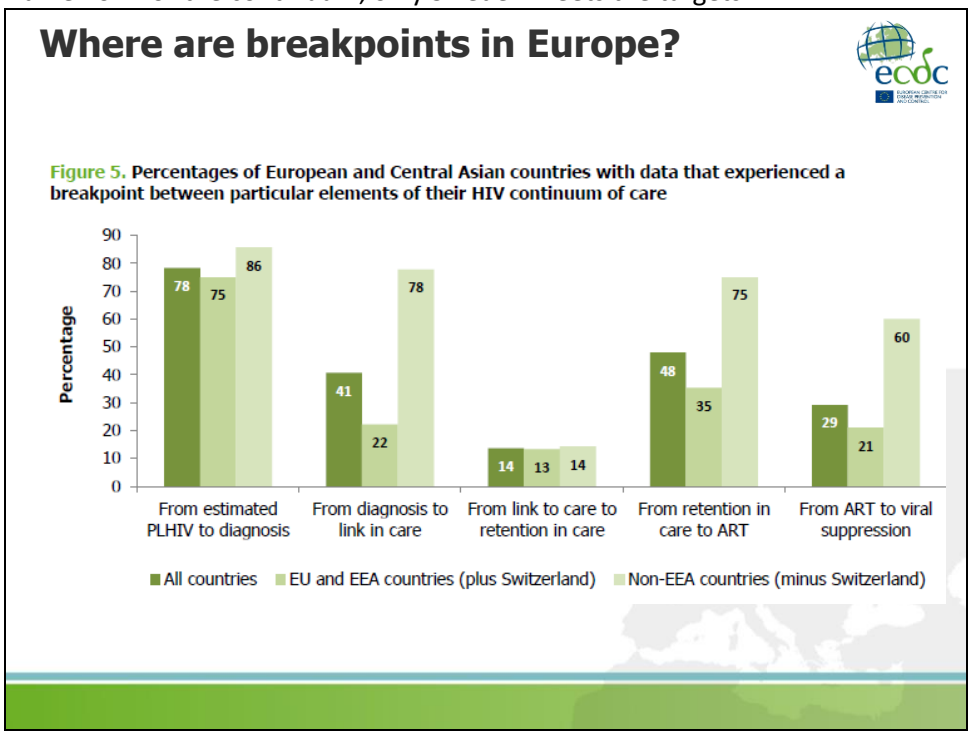
Continuum element	Definitions /Sources
Estimated number of PLHIV	ECDC modelling; WHO/UNAIDS Spectrum/EPP; back calculation
Number of people diagnosed with HIV	Mostly cumulative ever diagnosed; inconsistent on whether exclude deaths and outward migration[1]
Number of people linked to care	Very variable, reflecting differences in health care systems and includes e.g. registration, particular place for treatment, particular type of doctor, particul laboratory test (e.g. CD4, VL); some countries have a time limit
Number of people retained in care	Very variable and includes e.g. minimum level of service (e.g. one visit/year), care at a certain period after linked to care, in-patient care; some confusion with retention on ART; some countries merge linked to and retained in care
Number of people on treatment	Mostly ever started treatment, some on treatment at one year; on treatment when last seen; treated at least once in last year; most but not all exclude PMTCT and PEP
Number of people with viral suppressio	Threshold ranges from <20 to <500, but most use <50

- Frameworks for analysis – Various frameworks for analysis of the continuum have been developed. Raymond et al (2015) propose a breakpoint as a drop of >19%; UNAIDS (2015) 90-90-90 targets require a drop of <10% across four elements; Kelly et al (2015) use four quadrants based on three elements and a 60% threshold (see figure below).

[1] If the number diagnosed is those ever diagnosed with HIV, i.e. people who have died or migrated are not excluded, then the number in the second element will be higher than that in the first element of the continuum.



The figure below shows where breakpoints occur in the region. There are differences between EU/EEA and non-EU/EEA countries, e.g. in the EU/EEA, the main breakpoint is between the first two elements. Using the Kelly quadrants, EU/EEA countries tend to fall into quadrant 1 and non-EU/EEA countries into quadrant 3. The UNAIDS 90-90-90 targets are ambitious; using this framework for the continuum, only Sweden meets the targets.



It is also important to note the effect of treatment policy on a country's continuum. Different countries are currently using different thresholds for initiating treatment. If there is no threshold

then a higher proportion of PLHIV who have been diagnosed will be on treatment and virally suppressed.

Key points raised in the subsequent discussion included:

- The continuum is a potentially useful tool for countries to identify where there are gaps and weaknesses in their HIV response.
- Differences in health care systems and definitions mean that data may not be comparable across countries, so it may not be feasible to construct a regional continuum; if data is not comparable then the continuum will not be viewed as valid.

Following this, country experience with the continuum of care, was presented by participants from Belgium, Estonia, France, Germany, Italy, Luxembourg, Netherlands and Portugal (see separate presentations). These provided a range of good examples of ways of measuring the different elements of the continuum. Specific issues highlighted were:

- The first element is problematic for a number of countries i.e. lack of accurate estimates of the number of PLHIV.
- Some countries also lack data for all elements of the continuum (e.g. in Luxembourg there is uncertainty about the number of PLHIV who are undiagnosed and, specifically, questions about losses to follow up and whether more PLHIV have left the country than is documented; in Belgium there are also challenges with accurate estimation of the undiagnosed population; in the Netherlands it is not possible to differentiate diagnosed and linked to care; in Portugal linked to care is not monitored and the national HIV database only currently has complete data for 70% of people on treatment; in Italy retained in care is not monitored; in Germany data is not available for linkage to care).
- Difficulties in constructing a continuum when different definitions, data sources and timeframes are used, particularly with respect to linkage to care and retention in care. Related questions were raised also about whether each element should be evaluated separately or derived from the previous element, and whether the continuum should go back to the first HIV case registered or focus on a more recent period of time.
- Linkage of data sources is a challenge due to technical issues (e.g. unique identifiers, matching, de-duplication, confidentiality), as well as organisational and systems issues. Specific challenges cited included lack of linked data from diagnosis to first clinic visit, due to the separation of public health and clinical data, a combined HIV notification system i.e. laboratory and clinician, insufficiently specific unique identifiers, and delays in registration or database entry of data (e.g. on patients diagnosed or put on treatment).
- Treatment-related issues such as changes in treatment thresholds over time and treatment interruption, and approaches to estimating the number of PLHIV on treatment (e.g. using cohort and drug prescription data in Germany).
- Not all countries have disaggregated data to identify whether or not there are differences between key populations/transmission groups in engagement in each element of the continuum (e.g. in France, PWID are the population with highest proportion represented at each stage of the continuum and non-French heterosexual men are the population with the lowest proportion represented at each stage. The median time in months from HIV infection to viral suppression is also being monitored. Despite having the highest engagement in care, the median time from infection to viral suppression is longest for PWID; the continuum of care does not show this so could present a misleading picture).

Countries also identified a range of possible actions to improve the continuum; these vary between countries but included: use of unique identifiers to avoid double counting; improved collaboration to link surveillance and clinical/cohort data; automated retrieval of viral load and CD4 measurements from laboratory databases; triangulating care data with data from health insurance companies; faster registration and data entry.

Key points raised in the subsequent discussion included:

- The extent to which common definitions are possible or useful.
- The need for unique identifiers for longitudinal analyses.
- The need for more accurate estimation of the undiagnosed population.
- The challenges for the continuum associated with inward and outward migration, e.g. should inward migrants really be counted as newly diagnosed if they have been tested and treated before arriving in the host country.
- The value of comparing the findings of sample studies and cohort studies; if the findings are similar then cohort data could potentially be used for the treatment and viral suppression elements of the continuum.
- The limitations of using clinic data for the continuum, e.g. if key populations and the uninsured are under-represented among clinic patients.
- The need to disaggregate data by key population/transmission group.
- The importance of monitoring the time between infection and diagnosis, both from a public health perspective and an individual patient perspective, and the challenges of integrating time elements into the continuum.
- The time between diagnosis and treatment has reduced in most countries and is likely to be further reduced in future as countries shift towards test and treat; increasingly the first and second elements of the continuum are most important for EU/EEA countries.

Defining the continuum of care for monitoring the HIV epidemic in Europe: Linkage to and retention in care

This session was organised and facilitated by Public Health England (PHE) on behalf of WP4 of the OptTEST project. Sara Croxford (PHE) presented a summary of the results from a review of the literature on linkage to care. This review included studies published up to the end of June 2015 and focused on definitions and measurements of linkage to care, as well as barriers to being linked to care after diagnosis in the WHO European Region.

Key findings of the review:

- There is limited published data on linkage to care in Europe; most studies are from the USA and Canada.
- There is a wide range of definitions of linkage to care in use (e.g. CD4 count measurement within 28 days, 1 month, and/or 3 months of diagnosis; CD4 cell count or viral load measurement after HIV diagnosis within 3 months; first HIV consultation within 4 weeks, 1 month of diagnosis and/or within 6 months; attendance at a specialist HIV appointment

within 72 hours of a positive rapid test result; HIV unit referral within 4 weeks (≤ 28 days); registration/enrolment at an HIV clinic within 1 month of diagnosis).

- The majority of studies defined linkage to care using laboratory data, which despite being relatively reliable, may not always accurately reflect the date when a patient is integrated into HIV specialist care.
- The variety of settings, time periods, populations and definitions utilised make it difficult to compare measurements between countries and studies.
- There is limited research focussing on barriers to patients being linked to care following diagnosis, with the vast majority being single-site studies from the UK. These are not necessarily generalizable to other European countries, as barriers are often a product of a country's cultural, political and social environment.

Participants then divided into working groups to discuss:

- *What data are collected at national level that could be used to monitor linkage to care following diagnosis?*
- *What data are collected at national level that could be used to measure retention in care?*
- *What time period should be used to define prompt linkage to care as part of a working surveillance definition and how could this definition be validated?*
- *How can cohort data contribute to the monitoring of linkage to care and retention in care at national level?*

Feedback from the working groups and subsequent discussions highlighted the following:

- The key issue is to be clear about the purpose of monitoring the continuum of care, and to avoid conflating monitoring for public health purposes with monitoring quality of clinical care and individual patient outcomes. Overall, from a public health perspective, i.e. population level transmission, the most useful elements of the continuum are the estimated number of PLHIV, diagnosed, on treatment and viral suppression. Linkage to and retention in care are more relevant for measuring how well services are being provided and patient outcomes; late diagnosis and AIDS deaths are important measures of quality of care and performance but these may not necessarily need to be included in the continuum.
- Given the range of definitions of linked to care used, a standard working definition could include time between HIV diagnosis and date of first contact with whoever is responsible for initial care (e.g. measured through date of first CD4, VL, ART).
- Developing a standard definition of 'prompt' linkage to care is challenging. Although it is important for patients to have a CD4 count done as soon as possible after diagnosis, the timeframe for this will depend on country guidelines and resources. One option would be to have a range of definitions e.g. 'prompt' i.e. within 3 months and 'very prompt' within 14-28 days post diagnosis. With the shift to test and treat, the time between testing and starting treatment will be the critical issue.
- A consistent approach to measurement of retention in care is also challenging, e.g. the frequency of last measure of VL will vary between countries and patients and if patients are seen every 18 months this will be a problem for annual monitoring. One option would be to use data on VL collected by TESSy as evidence of retention in care. Alternatively, treatment (e.g. prescribing or insurance data) may be a better marker than the frequency with which patients are in contact with a provider.

- Use of cohort data for monitoring linkage to care and retention in care has other challenges, again because different country cohorts use a range of definitions; cohort data is likely to be more useful for monitoring retention than linkage to care. Issues such as the representativeness of data and bias also need to be considered.
- Other issues that need to be considered include the implications of home testing, false positives and confirmatory testing.

Defining the continuum of care for monitoring the HIV epidemic in Europe: Treatment and viral suppression

Participants divided into two working groups. The first group, comprising mainly surveillance experts, discussed the following questions:

- *How can on treatment be defined and measured? What are the best data sources for this?*
- *How can viral suppression be defined and measured? What are the best data sources for this? How long after treatment initiation?*

Feedback from this group included the following points:

- 'On treatment' could be defined as within one calendar reporting year, the number of people who received at least one treatment prescription in that year or who have picked up drugs from a clinic or pharmacy. Data sources could include registries of people on treatment in countries that have centralised distribution, drug or prescribing data. Other issues include: completeness of clinical data is variable across countries, so the representativeness of those for whom data is available is questionable; treatment data is sometimes reported later than surveillance data.
- All countries in this group could report on viral suppression using a cut off of <50, but this group advised to provide the option of a slightly higher cut off for reporting for countries in the region for whom <50 is not possible. It is important to be clear what the purpose of the cut off is e.g. with respect to onward transmission, drug resistance. Data sources would be similar; in addition, potential collaboration with EuroSIDA should be explored to obtain national data for countries without cohort studies.

The second group, comprising mainly those involved in cohort studies, discussed the following questions:

- *How representative of the total diagnosed population of PLHIV is cohort data for estimating the last two stages of the continuum (proportion on ART and proportion virally suppressed)?*
- *How should viral suppression be defined, and how long after treatment initiation?*
- *What calendar time period should be considered for on ART and for viral suppression?*

Feedback from this group included the following points:

- Coverage of cohorts ranges from national to a proportion of people who are diagnosed/in care to specific centres. Some countries, for example Spain, have conducted formal assessments of this. A separate ECDC project is currently assessing the representativeness

of cohort studies and documenting differences in coverage. In addition, for some cohorts there are variations in how up to-date their data is vis-à-vis surveillance data.

- This group also noted the need to be clear about the purpose of the definition of viral suppression i.e. from a transmission or clinical perspective; a cut off of <200 was suggested, to allow for assay blips, although some also proposed using <1000 if reducing onward transmission is the main issue of concern.
- The time period that is appropriate again depends on the purpose; for public health purposes the continuum is a snapshot and therefore when people were diagnosed or started on treatment is less critical and the focus should be on the most recent measure of viral load.

Other points made in the plenary discussion included:

- The question of whether viral load needs to be included in the continuum was raised, as viral suppression is high in the majority of people on treatment in Europe. However, treatment and viral suppression are still key challenges in some countries in the region and it will be important to continue to monitor these.
- There is no firm consensus on the cut off for defining viral suppression; some proposed <50, while perhaps the majority proposed <200 for both individual health benefits. If only public health is being considered a higher threshold i.e. <1000 was also suggested to be considered.

Adapting the continuum of care for Europe: Summary and priority actions

This session included started with a panel (Lella Cosmaro, Roger Drew, Magdalena Rosinska, Caroline Sabin, Annemarie Stengaard and Virginie Supervie) who were asked to give their views on the following specific questions:

- *From your perspective, what is the main purpose of monitoring the HIV continuum of care?*
- *What are your thoughts on using a two dimensional continuum (i.e. monitoring of viral suppression through a four point continuum plus quality of care indicators)?*
- *What are the priorities for optimising monitoring of the continuum of care at EU level over the next 2-3 years?*

Key points made by the panel and in the following plenary discussion included:

- There was support for using a four point continuum (number living with HIV, number diagnosed, on ART, virally suppressed), ideally with standard definitions, for national (and regional) level monitoring and using separate quality indicators at clinic and patient level. It is acknowledged that it will be difficult to establish rigid common definitions for linked to care and retained in care. Some suggested that for public health monitoring purposes the treatment element does not need to be included in the continuum. Others noted that in countries in the region that are performing less well it is still necessary to monitor late diagnosis, treatment and retention at national level. It was also suggested that mortality, specifically within the first year after diagnosis, should be included as a quality indicator.

- The continuum definitions and quality indicators e.g. cut off points or thresholds and optimal time periods from x to y need to be based on evidence.
- There is a consensus that countries should only be asked to monitor and report on data that is useful for them and that will or can be used by ECDC; although cross-country comparisons may not always be possible, use of standard definitions will help to address this, and benchmarking can play an important role in influencing national policy makers.
- The continuum can be a useful tool for communicating complex issues related to testing and care to policy makers.
- The meeting highlighted the need for closer collaboration and better links between surveillance and cohort data, and for use of unique identifiers, although there are issues of privacy and data protection to be addressed; there is also a need for support to countries where cohorts do not exist, including non-EU countries, to establish cohort studies.
- The meeting has also highlighted the need for disaggregated data for key populations for each element of the continuum to identify which populations are not being tested, treated or achieving viral suppression and inform policy changes and targeted interventions; policy on treatment for undocumented migrant is a key issue but there may also be others who are not getting into care.
- The issue of PLHIV who are outside the system and hence outside the continuum needs to be taken into account; it is also critical not to make assumptions about those who are outside the continuum.

ECDC can play an important role by:

- Promoting collaboration in order to bring together surveillance and cohort data and link separate national databases.
- Providing support to countries to develop more accurate estimates of the number of PLHIV and the proportion who are undiagnosed including through use of the modelling tool.
- Developing and agreeing standard definitions for the four elements of the continuum in consultation with Member States.
- Reporting on and publishing available data on the continuum of care in Europe.

Teymur Noori and Anastasia Pharris then summed up next steps:

- Meeting report – The summary report of this meeting will be circulated to participants within 2 weeks.
- Dublin monitoring – The Dublin advisory group meeting on October 15-16 will review the outcomes of this meeting and decide on EU-level monitoring for public health purposes using a continuum based on four elements; the meeting will also consider how Dublin monitoring can help to capture data on quality of care indicators in the other dimension of the continuum.
- Projects – ECDC will continue to support improvements in PLHIV estimates through the modelling project, including country capacity development and additions to the model. ECDC will also continue to support the EuroCoord continuum and representativeness analysis projects and will convene an advisory group to support these projects. The project on AIDS deaths that ECDC is planning will also be linked to work on the continuum of care. Additional projects in 2016-2018, based on the outcomes of this meeting, will also be considered.

- HIV Surveillance – The ECDC-WHO HIV Surveillance Network meeting in March 2016 will also be used as an opportunity to assess progress and promote dialogue on surveillance-based indicators to measure concepts included in the HIV continuum of care.

Andrew Amato closed the meeting, thanking participants for their contribution to an interesting, informative and productive meeting.

Annex 1: Programme

Tuesday 8th September

SESSION 1	INTRODUCTION
Chairs	Andrew Amato and Anastasia Pharris
09:00 – 09:30	Welcome and meeting objectives (Andrew Amato)
09:30 – 09:45	ECDC activities related to the HIV Continuum of Care (Anastasia Pharris)
09:45 – 10:00	European Projects related to the HIV Continuum of Care • OptTEST (Dorthe Raben) • Euro HIVEDAT (Jordi Casabona) • EuroCoord (Kholoud Porter)
10:00 – 10:15	WHO Consolidated Strategic Information Guidelines: Monitoring the HIV Continuum of Care (Annemarie Stengaard, WHO Regional Office for Europe)
10:15 – 10:30	Discussion
10:30 – 11:00	**COFFEE**

SESSION 2	EUROPEAN EXPERIENCES AND CHALLENGES WITH THE HIV CONTINUUM OF CARE
Chairs	Teymur Noori and Annemarie Stengaard
11:00 – 11:30	Country-reported data on the HIV Continuum of Care: Dublin 2014 (Teymur Noori and Roger Drew)
11:30 – 12:30	Case studies from European Member States on the HIV Continuum of Care • Netherlands (Ard van Sighem) • Portugal (Antonio Diniz) • Luxembourg (Jean-Claude Schmidt) • Italy (Barbara Suligoi) • Estonia (Kaja-Trinn Laisaar)
12:30 – 13:30	**LUNCH** • *Optional ECDC HIV modelling tool demonstration (Ard van Sighem and Chantal Quinten)*
13:30 – 14:30	Case studies from European Member States on the HIV Continuum of Care (continued) • Germany (Barbara Gunsenheimer-Bartmeyer) • France (Virginie Supervie) • Belgium (Dominique van Beckhoven)

SESSION 3	DEFINING THE CONTINUUM OF CARE FOR MONITORING THE HIV EPIDEMIC IN EUROPE: LINKAGE TO AND RETENTION IN CARE (OptTest[2])
Chairs	Lara Tavoschi and Valerie Delpech
14:30 – 15:00	Linkage to care: results from a literature review (Sara Croxford)
15:00 – 15:30	**COFFEE**
15:30 – 16:45	Working Groups
16:45 – 17:30	Plenary discussion
19:00	**ECDC hosted dinner**

Wednesday, 9th September

SESSION 4	TREATMENT AND VIRAL SUPPRESSION
Chairs	Otilia Sfetcu and Julia del Amo
09:00 – 09:15	Recap of Day 1 (Anastasia Pharris)
09:15 – 10:45	Working Groups (including **COFFEE)**
10:45 – 11:15	Plenary discussion

SESSION 5	ADAPTING THE CONTINUUM OF CARE FOR EUROPE
Chairs	Anastasia Pharris and Teymur Noori
11:15 – 12:15	Panel (Lella Cosmaro, Roger Drew, Magdalena Rosinska, Caroline Sabin, Annemarie Stengaard, Virginie Supervie)
	Plenary discussion
12:15 – 12:30	Next steps and closing (Andrew Amato)

[2] OptTest is funded by the European Health Programme

Annex 2: List of participants

Name	Country
Dominique Van Beckhoven	Belgium
Tonka Varleva	Bulgaria
Tatjana Nemeth Blazic	Croatia
Zoran Dominkovic	Croatia
Marek Malý	Czech Republic
Susan Cowan	Denmark
Dorthe Raben	Denmark
Annemarie Stengaard	Denmark
Kristi Rüütel	Estonia
Kaja-Triin Laisaar	Estonia
Françoise Cazein	France
Dominque Costagliola	France
Virginie Supervie	France
Barbara Gunsenheimer-Bartmeyer	Germany
Georgios Nikolopoulos	Greece
Georgia Vourli	Greece
Giota Touloumi	Greece
Barbara Suligoi	Italy
Lella Cosmaro	Italy
Enrico Girardi	Italy
Jean-Claude Schmit	Luxembourg
Cinthia Menel-Lemos	Luxembourg
Peter Reiss	Netherlands
Ard van Sighem	Netherlands
Magdalena Rosinska	Poland
Antonio Diniz	Portugal
Mariana Mardarescu	Romania
Irena Klavs	Slovenia
Maria Asuncion Diaz	Spain
Julia Del Amo	Spain
Jordi Casabona	Spain
Maria Axelsson	Sweden
Anders Sönnerborg	Sweden
Giedrius Likatavicius	Switzerland
Valerie Delpech	United Kingdom
Sara Croxford	United Kingdom
Caroline Sabin	United Kingdom
Kholoud Porter	United Kingdom
Annabelle Gourlay	United Kingdom
Roger Drew	United Kingdom
Kathy Attawell	United Kingdom