

Country Report

Evidence on linkage to care after HIV diagnosis in Europe

Czech Republic



August 2017

Authors:

Sara Croxford, Ifeoluwa Olowoniyi and Valerie Delpech
Public Health England (PHE), UK

This country report is part of OptTEST by HiE Work Package 4 led by Public Health England (PHE), UK.

Acknowledgments

Thanks to the OptTEST project partners and the steering committee, and in particular to the national focal points that answered the survey.

OptTEST is co-funded by the 2nd Health Programme of the European Union.



Disclaimer

The content of this country report represents the views of the author and it is his/her sole responsibility; it can in no way be taken to reflect the views of the European Commission and/or the Executive Agency for Health and Consumers or any other body of the European Union. The European Commission and/or the Executive Agency do(es) not accept responsibility for any use that may be made of the information it contains.

Suggested citation:

Sara Croxford, Ifeoluwa Olowoniyi and Valerie Delpech. Country Report: Evidence on Linkage to care after HIV diagnosis in Europe. Czech Republic. UK, October 2017

OptTEST by HIV in Europe, 2017

Reproduction is authorised, provided that the source is acknowledged.

Contents

Background	4
Methodology.....	5
Assessing linkage to care using routinely collected EU/EEA surveillance data	5
Understanding the linkage to care context: a survey of national HIV surveillance focal points	5
Results	6
Assessing linkage to care using routinely collected surveillance data	6
Understanding the linkage to care context: a survey of national HIV surveillance focal points	9
Data and estimates.....	10
Data provision.....	11
Linkage to care definition and interpretation of estimates.....	11

Background

Published data on linkage to HIV care from the European Union are lacking and few countries routinely monitor HIV quality of care measures locally or nationally. With successful expansion of HIV testing into a variety of settings (including hospital admissions, community testing and self-testing or self-sampling), prompt access to medical care must be ensured as linkage to care impacts subsequent treatment uptake and is essential for optimal patient outcomes. OptTEST is a three-year project, (2014-2017) co-funded by the European Commission and led by HIV in Europe, that aims to optimise HIV testing and linkage to care in Europe. Work package (WP4) of OptTEST looks to explore and document linkage to HIV care and access to therapy across Europe. Pilot countries involved in WP4 include: UK, France, Estonia, Spain, Poland, Portugal, Greece and Czech Republic.

In June 2015, a literature review carried out by WP4 found that a number of definitions of linkage to care following HIV diagnosis had been applied in the literature from Europe. The variety of settings, time periods, populations and definitions made it difficult to compare measurements between countries and studies, highlighting the necessity for a standardised definition to ensure consistent assessment of quality of HIV care and clinical outcomes.

The OptTEST project, in collaboration with the European Centre for Disease Prevention and Control (ECDC), hosted a workshop at an expert meeting in Stockholm in September 2015 at which such a standard definition for defining and measuring linkage to care for surveillance and monitoring purposes was developed. Linkage to care was defined as: the proportion of patients seen for HIV care after diagnosis (measured by first CD4 count and/or viral load and/or clinic attendance date and/or treatment start date), with prompt linkage defined as linkage within 3 months.

To pilot the agreed surveillance definition and explore current linkage to care at national-level, WP4 has undertaken analyses of the 2015 European HIV case-based dataset held at the ECDC. The aim of these analyses was to determine the feasibility of using these data to routinely monitor linkage to care. This report also presents data from an OptTEST WP4 survey of national HIV surveillance contact points to better understand what structural factors influence linkage to care and monitoring linkage to care in countries across Europe.

Methodology

Assessing linkage to care using routinely collected EU/EEA surveillance data

These analyses used case-based European HIV surveillance data held at the ECDC. Laboratory-confirmed cases of HIV are submitted annually by the 53 countries in the WHO European Region to a joint database using The European Surveillance System (TESSy) portal.

People were included if they were newly diagnosed with HIV between 2010 and 2014 and were reported to the ECDC/WHO in 2015 using the revised TESSy data template. Completeness of key variables over time was calculated to determine the appropriateness of using TESSy to monitor linkage to care.

Individuals were excluded if they had been previously diagnosed with HIV (HIVstatus variable=PREVPOS), previously been in HIV care (CD4 more than 14 days prior to diagnosis date) or died within three months of diagnosis. People were also excluded if they had no CD4 data reported, only the year of diagnosis/CD4 count reported or a CD4 count reported with no date. All partial dates, where the only month/quarter and year were provided, were defaulted to the middle of the month/quarter.

Linkage to care was calculated as the time between the HIV diagnosis date and first CD4 count date. Linkage was considered prompt if the first CD4 count was taken up to three months (91 days) after diagnosis. In a sensitivity analysis, to assess the worst case scenario, those with no CD4 count reported after diagnosis were considered not linked to care.

Understanding the linkage to care context: a survey of national HIV surveillance focal points

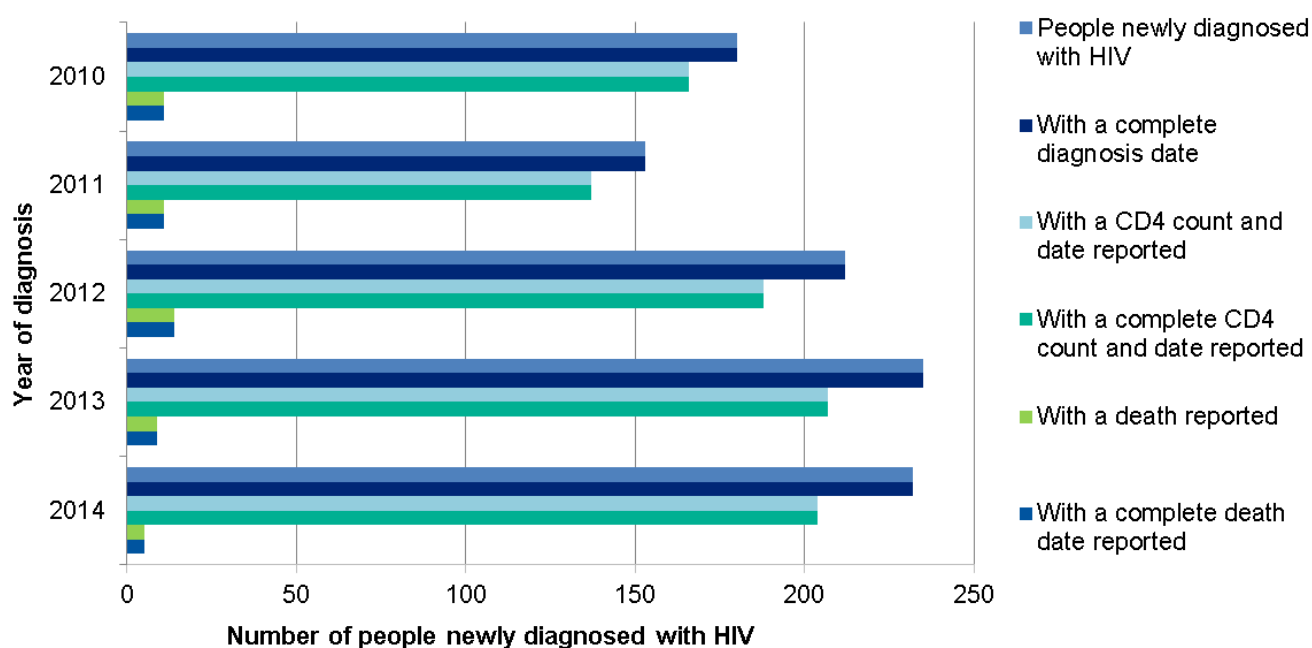
In September 2016, a short survey was sent to the 30 EU/EEA national contact points to better understand what structural factors influence linkage to care and monitoring linkage to care in countries across Europe. In the EU/EEA, competent bodies for surveillance in each Member State nominate a national contact point for HIV/AIDS. These contact points work with the ECDC and WHO Regional Office for Europe on the reporting of new HIV cases to TESSy. The questionnaire was developed in collaboration with international experts, including: the ECDC, the WHO Regional Office for Europe, OptTEST partner organisations, the HIV/AIDS Civil Society Forum, the EURO HIV EDAT project, AIDS Fondet in Denmark and the European AIDS Treatment Group (EATG). Topics covered included: where people can be tested for HIV, HIV care structure, data collection mechanisms, linkage definitions and data caveats. In section two of the survey, respondents were asked to provide data on CD4, viral load, care attendance and treatment initiation after diagnosis to better understand the sensitivity of the linkage to care definition.

Results

Assessing linkage to care using routinely collected surveillance data

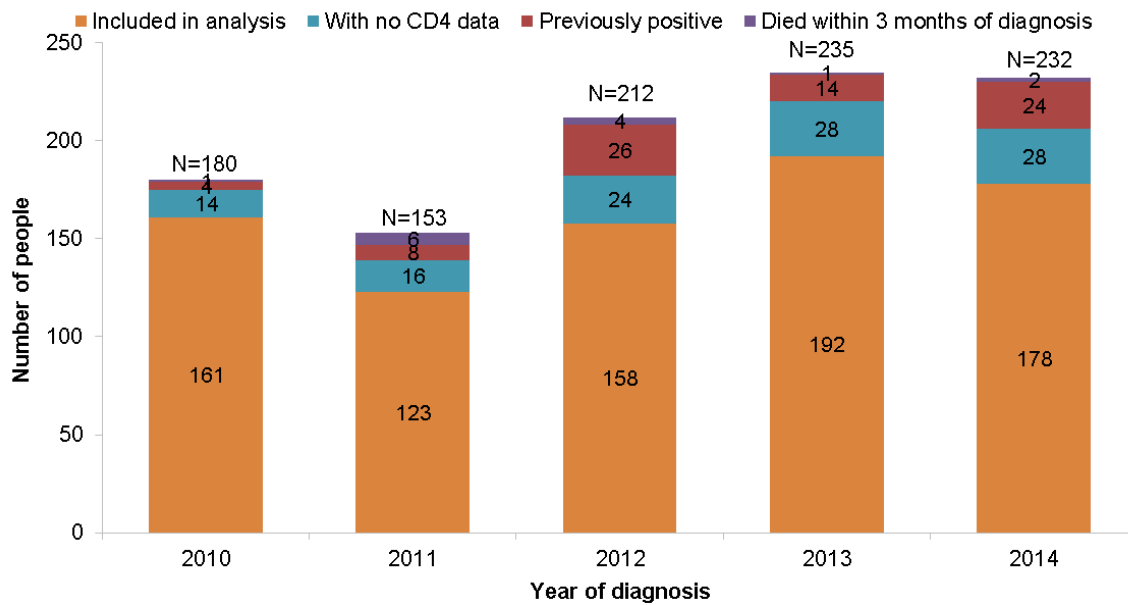
There were 1,012 new diagnoses of HIV between 2010 and 2014 in Czech Republic reported to TESSy. Of these, 100% had a complete diagnosis date reported and 89% had a CD4 count and CD4 date reported. For those diagnoses with CD4 data reported, 100% had complete information provided. 100% of people diagnosed over the five years that died had a complete death date. Trends in the completeness of these key fields over time can be seen in the graph below (Figure 1).

Figure 1: Trends in completeness of key fields used to calculate linkage to care in TESSy, 2010-2014



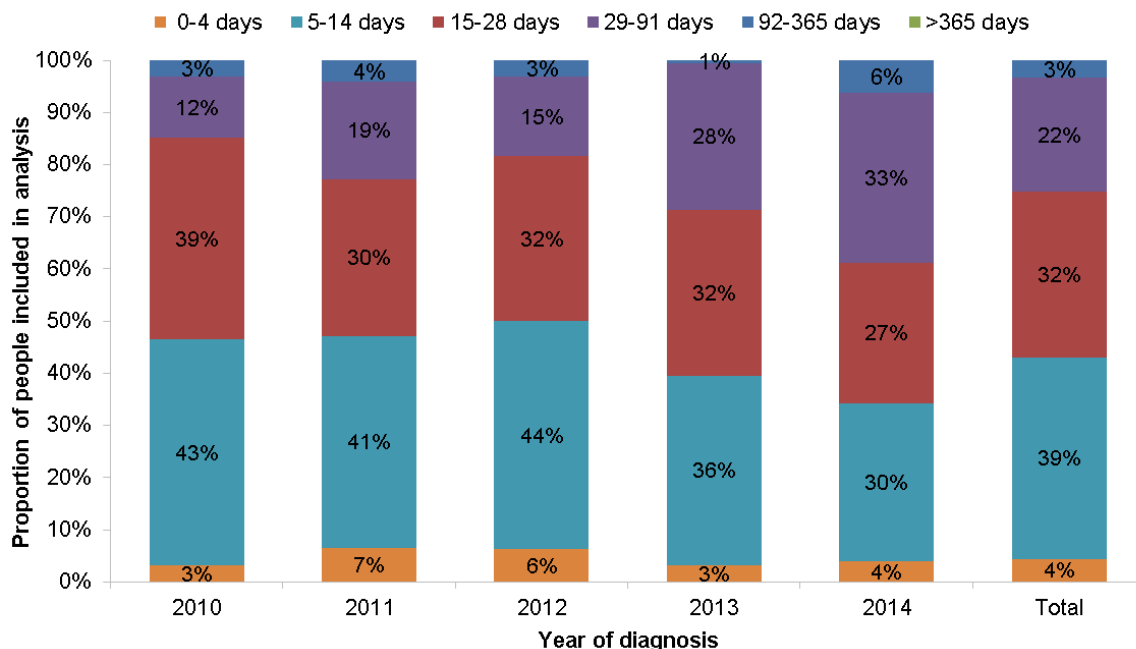
Of the 1,012 new diagnoses in Czech Republic from 2010-2014, 76 people were reported previously positive or were in care in other countries, 14 people died within 3 months of diagnosis and 110 people had missing CD4 information. The distribution by year can be seen in Figure 2.

Figure 2: Linkage to care calculation exclusions, 2010-2014



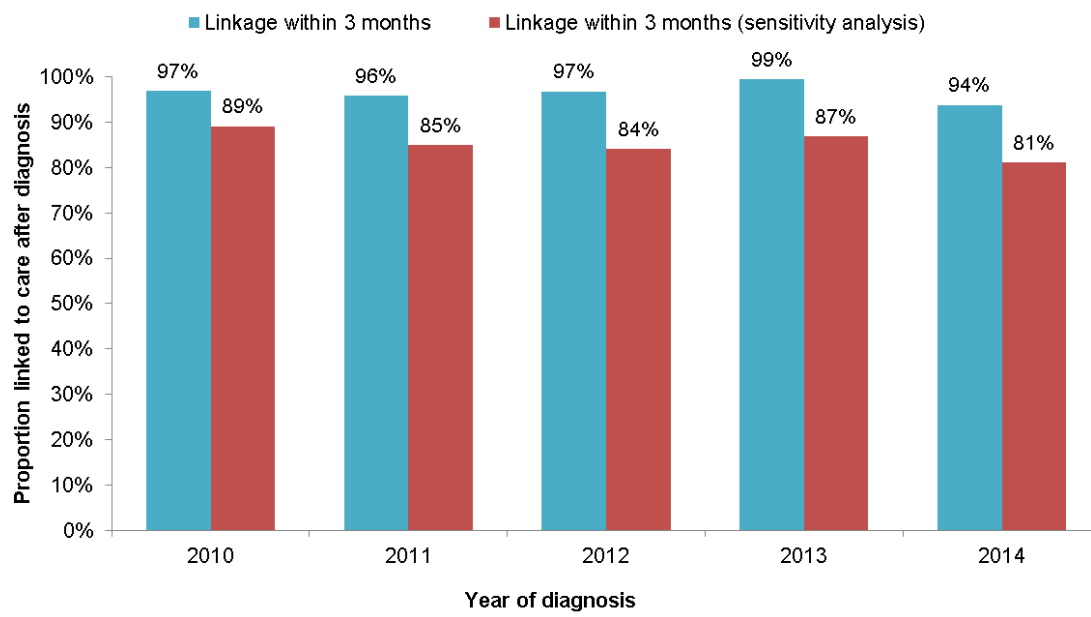
Of the 812 people included in analysis, 4% (36) people had a CD4 count taken within 0-4 days of diagnosis, 39% (313) people had a CD4 count within 5-14 days, 32% (258) people had a CD4 count within 15-28 days, 22% (178) people had a CD4 count within 29-91 days, 3% (27) people had a CD4 count within 92-365 days and 0% (0) people had a CD4 count over a year after diagnosis (Figure 3).

Figure 3: Distribution of time from diagnosis to first CD4 count, 2010-2014



Prompt linkage to care following diagnosis over time can be seen in Figure 4. Over the five years, linkage to care within 3 months was 97% (785/812). In sensitivity analysis, when those people without a CD4 count taken were included in the denominator and considered not linked to care, linkage within 3 months from 2010-2014 fell to 85% (785/922).

Figure 4: Prompt linkage to care and sensitivity analysis, 2010-2014



Understanding the linkage to care context: a survey of national HIV surveillance focal points

The survey response from Czech Republic was received by a representative from the National Institute of Public Health.

HIV testing and diagnosis

Available settings for HIV testing:

STI clinics	Yes
Emergency departments	Yes
Antenatal services	Yes
Labour wards	Yes
Infectious disease unit	Yes
Other inpatient admissions	Yes
Tuberculosis services	Yes
Other outpatient services	Yes
Drug services	Yes
Prisons	Yes
General practice/primary	Yes
Pharmacies	No
Community settings	Yes
Self-sampling	No
Home/self-testing	No
Laboratories	Yes
Other setting	No

Data on both negative and positive HIV tests these settings are reported as part of national surveillance, this includes data on reactive tests. The date of the lab confirmatory HIV test is used as the date of diagnosis.

HIV clinical care pathway

Routine HIV clinical care is provided in 8 dedicated HIV clinics. Baseline assessments carried out at initial entry into care include: CD4 count, viral load measurement, a complete sexual history, partner notification and a complete medical history.

HIV data capture:

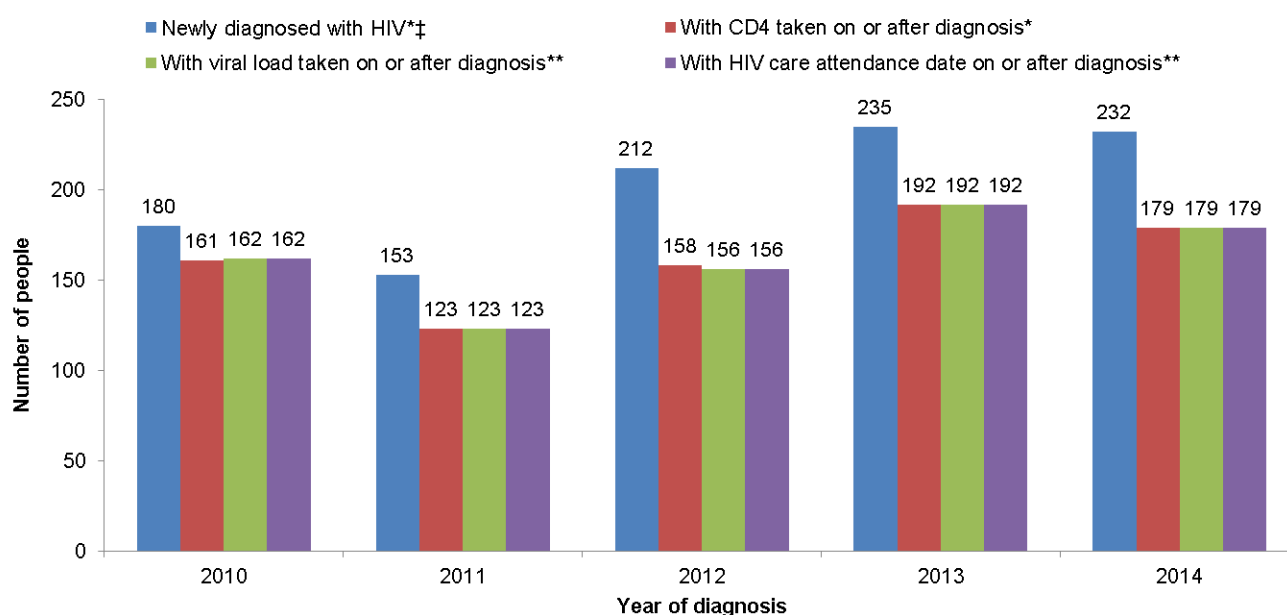
	Local level	National level
Date of first reactive test	No	Yes
Site of first reactive test	No	Yes
Confirmatory diagnosis date	Yes	Yes
Site of confirmatory diagnosis	Yes	Yes
HIV care attendance date	Yes	Yes
First CD4 count	Yes	Yes
First CD4 date	Yes	Yes
First viral load	Yes	Yes
First viral load date	Yes	Yes
HIV treatment start date	Yes	No

Czech Republic currently has guidelines in place for linkage to care after diagnosis as well as a current definition for linkage to care.

Data and estimates

Figure 5 shows the availability of CD4, viral load and care attendance data after diagnosis using information from TESSy and the Czech Republic National HIV Surveillance System. All of these markers could be used as alternative proxies for linkage into care. No data were provided on treatment initiation. Availability of data improved over time for all markers.

Figure 5: Data availability for people newly diagnosed with HIV, 2010-2014



*Data source: TESSy

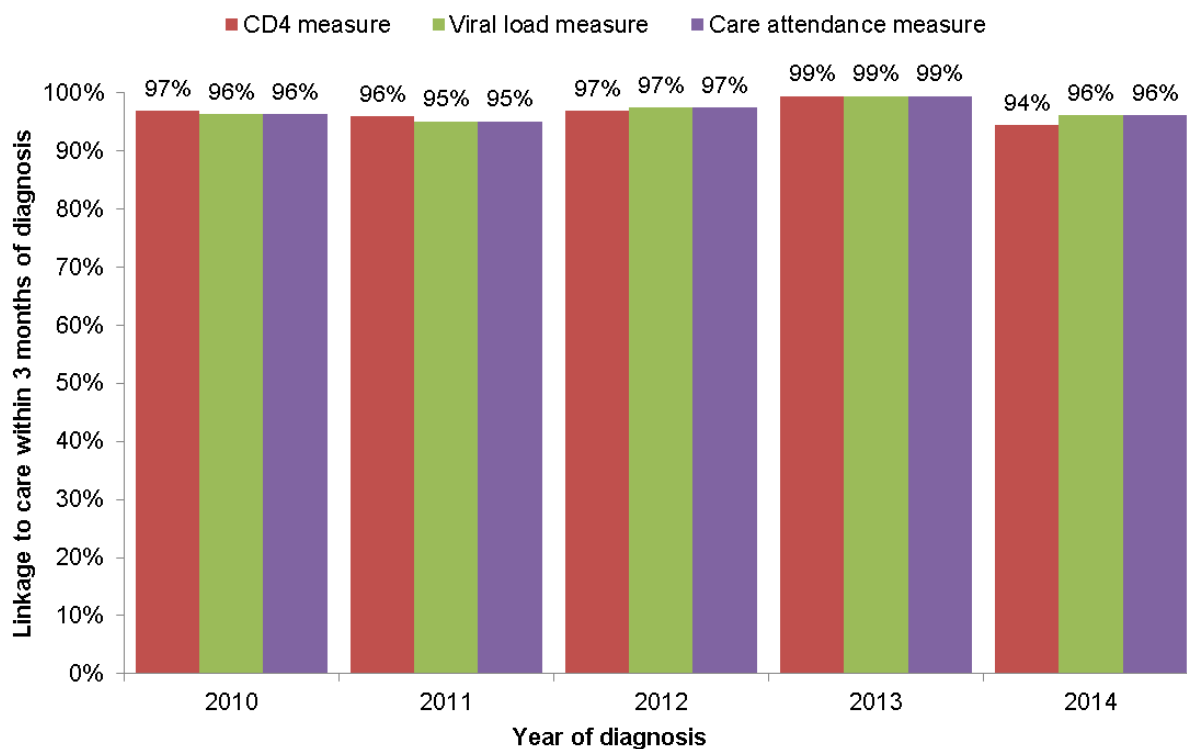
**Data source: Czech Republic HIV surveillance system

‡ Excluding those who died within three months of diagnosis, were diagnosed previously or previously seen for care

The timeliness of care entry using the different measures for linkage (CD4, viral load, attendance, treatment initiation) can be seen in

Figure 6. Estimates are presented where data are available (e.g. number of people with a CD4 count within 3 months / number of people with a CD4 after diagnosis). Linkage to care within 3 months of diagnosis was highest in 2010 and 2011 using the CD4 marker, whereas in 2014, linkage was highest when using the viral load or care attendance measures.

Figure 6: Linkage to care within 3 months using different markers of care entry, 2010-2014



Data provision

There were a number of difficulties reported by Czech Republic in providing the data used in the calculations for linkage to care above. CD4 data are subject to significant reporting delay and missing data need to be considered. No treatment initiation data are collected centrally. Finally, there is underreporting of death data to incomplete linkage between registries.

Linkage to care definition and interpretation of estimates

The most appropriate measure used to monitor linkage to care after diagnosis in Czech Republic is viral load. Viral load is performed centrally in the National Reference Laboratory as well as confirmation of all primarily HIV reactive persons. Initial viral load is assessed at first attendance of HIV clinic in all patients. No data caveats were described to consider when interpreting estimates.

Prior to this analysis, there were no national, sub-national or previously published estimates of linkage to care in Czech Republic. Unpublished estimates are lower than those generated in this exercise since they include in denominator also patients with confirmed HIV positivity but without any subsequent contact with care (i.e. without any viral load/CD4 on or after diagnosis).

The estimates produced as a result of the OptTEST analysis were considered robust enough to be able to comment on linkage to care trends, as there was no substantial changes to the care system during the years examined.

SPONSOR PARTNERS



Co-funded by the 2nd Health Programme of the European Union

