



Berlin's Fast Track Cities Initiative

Where are we now?

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Background & Aims

In July 2016 Berlin joined the Fast-Track Cities Initiative, a network of more than 50 cities around the world highly burdened with HIV who share the common goal of ending the AIDS epidemic in cities by 2030.

In order to achieve this goal, 90% of all people living with HIV (PLHIV) should be aware of their HIV status, 90% of all people diagnosed with HIV should be receiving sustained antiretroviral therapy (ART) and 90% of all people receiving ART should have achieved viral suppression by 2020.

So far, it was unknown whether Germany has already reached these targets.

The aim of this study was to determine viral suppression and persistent viraemia in a large study population of PLHIV over time between 1997-2015 and to determine the HIV continuum of care for Berlin and Brandenburg for 2015.

Methods

PLHIV diagnosed and PLHIV treated

The first two stages of the HIV care continuum on the proportion of PLHIV with HIV diagnosis and treatment were derived from the RKI HIV estimates on PLHIV.

PLHIV with viral suppression

For the estimation of the number of people achieving viral suppression we analyzed data from two large German cohort studies, the ClinSurv HIV and the HIV-1 Seroconverter cohort both under the directive of the Robert Koch Institute. Cohort data from 1997-2015 was included in the analysis. For the analysis of persistent viraemia in the study population we developed a 10-day grid model to close gaps between documented viral load (VL) measurements. A period of 180 days was determined as time between ART initiation and viral suppression (VL<50 copies/ml). Persistent viraemia was defined as two consecutive VL measurements >50 copies/ml within 180 days or one VL measurement >1000 copies/ml.

Results

PLHIV diagnosed and PLHIV treated

The RKI estimates on the proportion of PLHIV with HIV diagnosis and treatment show that in 2015 in Berlin and Brandenburg 88% of PLHIV are diagnosed and 85% of diagnosed are receiving ART.

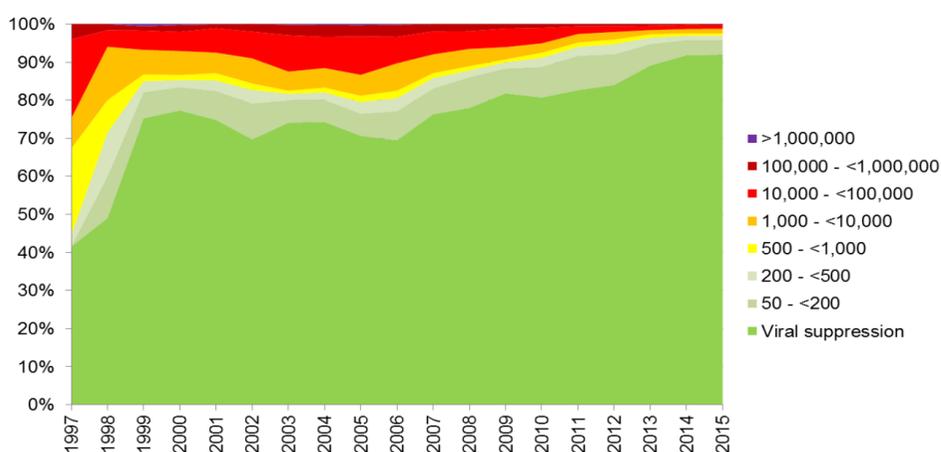


Figure 1: Viral load (copies/ml) of the patients with ART ≥180 days, 1997-2015

PLHIV with viral suppression

Included in this analysis were 2,437 patients from Berlin (N=2,208) and Brandenburg (N=229). Of those, 1,269 were patients of the ClinSurv HIV cohort, 1,001 were patients of the HIV-1 Seroconverter cohort and 167 were in both cohort studies. The proportion of patients with viral suppression continuously increased from 42% in 1997 to 92% in 2015 (Figure 1).

The proportion of patients with viraemia >1000 copies/ml decreased from 25% in 1997 to 2% in 2015 (Figure 1).

HIV continuum of care

The HIV continuum of care for Berlin and Brandenburg in 2015 is 88-85-92.

Conclusions

We provide a method to determine all individual stages of the HIV continuum of care for Berlin and Brandenburg for 2015 using HIV case surveillance data and clinical cohort data.

Over the study period from 1997-2015 we observed a continuous and remarkable increase in the proportion of PLHIV receiving ART and showing viral suppression.

Furthermore a notable proportion of those with viraemia showed low level viraemia <1000 copies/ml and are therefore unlikely to be transmit HIV. However, individual health risks and HIV drug resistance are problematic and viral suppression continues to remain the goal.

In terms of the Fast-Track Cities Initiative and the 90-90-90 goal, Berlin and Brandenburg can be almost considered successful.