

# Detailed HIV treatment cascade on a hospital level



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## Background

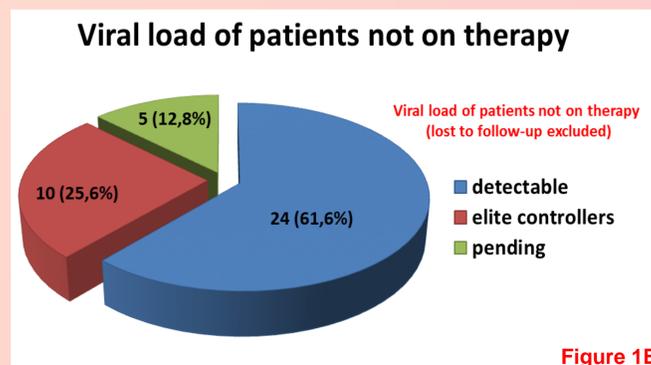
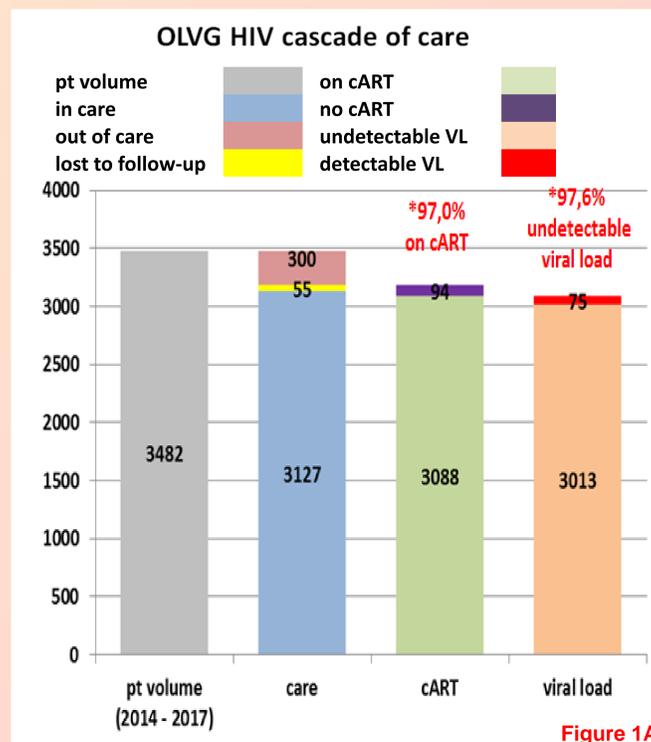
The hiv treatment cascade is a model to outline the sequential steps of medical care that people living with hiv go through from initial diagnosis to achieving the goal of viral suppression. It shows the proportion of individuals living with hiv who are engaged at each stage. For a hospital, this cascade starts at the moment a patient is assigned to its care. In the OLVG the cascade elements form an essential part of our Value Based Health Care for hiv program (VBHiC). Here, we analyse the achievements of the cascade in our hospital and describe the reasons why individuals did not reach certain levels.

## Methods

We included all patients receiving care in the OLVG from January 1<sup>st</sup> 2014 and censored the cascade on August 1<sup>st</sup> 2017. We analysed the dynamics of the population, the proportion of patients receiving combination antiretroviral therapy (cART) and achieving viral suppression (<200 copies/ml) but also the reasons why individuals did not reach these levels of the cascade. Lost to follow-up (LTFU) was defined as no contact or laboratory result >365 days; we accounted those who started on cART as not suppressed at the censoring date, although they might have received continuation of prescriptions elsewhere (missing is considered to be failure).

## Conclusion

Within our Value Based Health Care for hiv program, we reached high levels of treatment coverage and viral suppression in those patients assigned to our care: 97,0% of the hiv patients started and remained on cART and 97,6% on cART had a suppressed viral replication. Therefore, we already surpassed the targets set by the WHO for 2030 ((95)-95-95).



## Results

From a total of 3482 patients who were in care in the study period, 300 left our care for different reasons: 83 died, 166 moved to another centre and 51 went abroad. Of the 3182 remaining patients, 3088 started and remained on cART (97,0%), 55 were LTFU and 39 never started cART. Ten of these 39 (25,6%) were elite controllers with continuously suppressed viral replication and 5 (12,8%) were new patients who just came in care within a month with a pending viral load result. The remaining 24 (61,6%) patients were analysed more specifically (see figure 1C). On the censoring date 3013/3088 (97,6%) on cART had a suppressed viral load. In the LTFU population 33/55 (60%) had an undetectable viral load at their last contact (32 on cART and 1 elite controller). The reasons for LTFU and virological failure are currently analysed and will be presented soon.

## Characteristics of patients not on therapy with a detectable VL

N	24
Male (%)	70,8%
Age (years, median) (range)	42,1 (28 - 60)
MSM (%)	58,3%
In care (years, median) (range)	5,3 (0,7 - 12,4)
Last HIV-1 RNA (copies/ml, median) (range)	5143 (220 - 43375)
Last CD4-count (median +/- IQR)	727 (1000 - 490)
Native country/continent	
- The Netherlands	7 (29,2%)
- Rest of Europe	4 (16,7%)
- The Netherlands Antilles	3 (12,5%)
- Africa	3 (12,5%)
- Asia	3 (12,5%)
- South America	3 (12,5%)
- North America	1 (4,2%)
Reason for not starting therapy	
- Will start soon	2 (8,3%)
- Refused treatment	20 (83,3%)
- Severe comorbidity	2 (8,3%)

Figure 1C

