



# Managing HIV infection in the COVID-19 era. The cascade of care as tool to evaluate the effectiveness of city-wide programs against HIV/AIDS

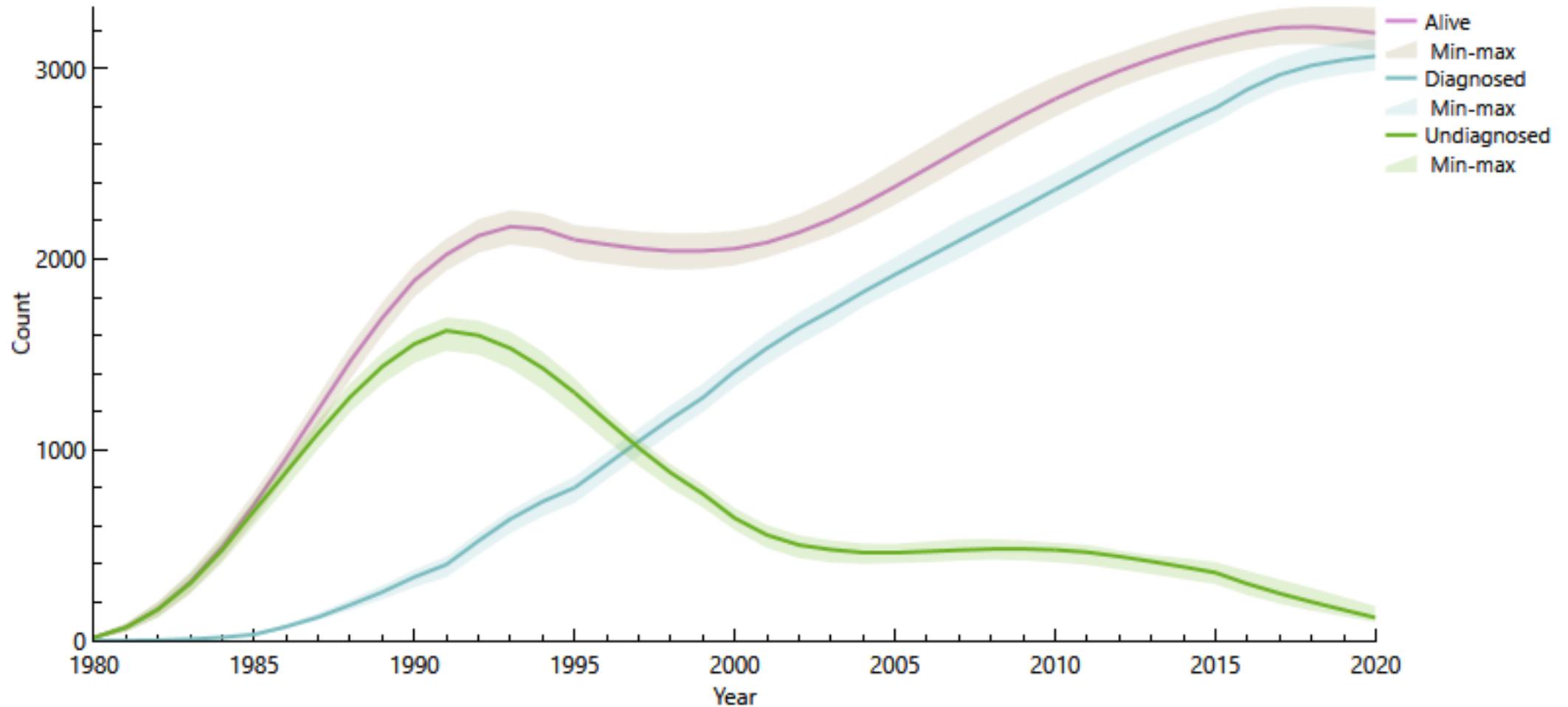
Franco Maggiolo<sup>1</sup>, Rodolfo Teocchi<sup>1</sup>, Paolo Meli<sup>2</sup>, Daniela Valenti<sup>3</sup>,  
Annapaola Callegaro<sup>1</sup>, Marco Rizzi<sup>1</sup>

ASST Papa Giovanni XXIII<sup>1</sup>, Comunità Emmaus & Caritas Bergamasca<sup>2</sup>,  
Associazione FROM<sup>3</sup>, Bergamo, Italy

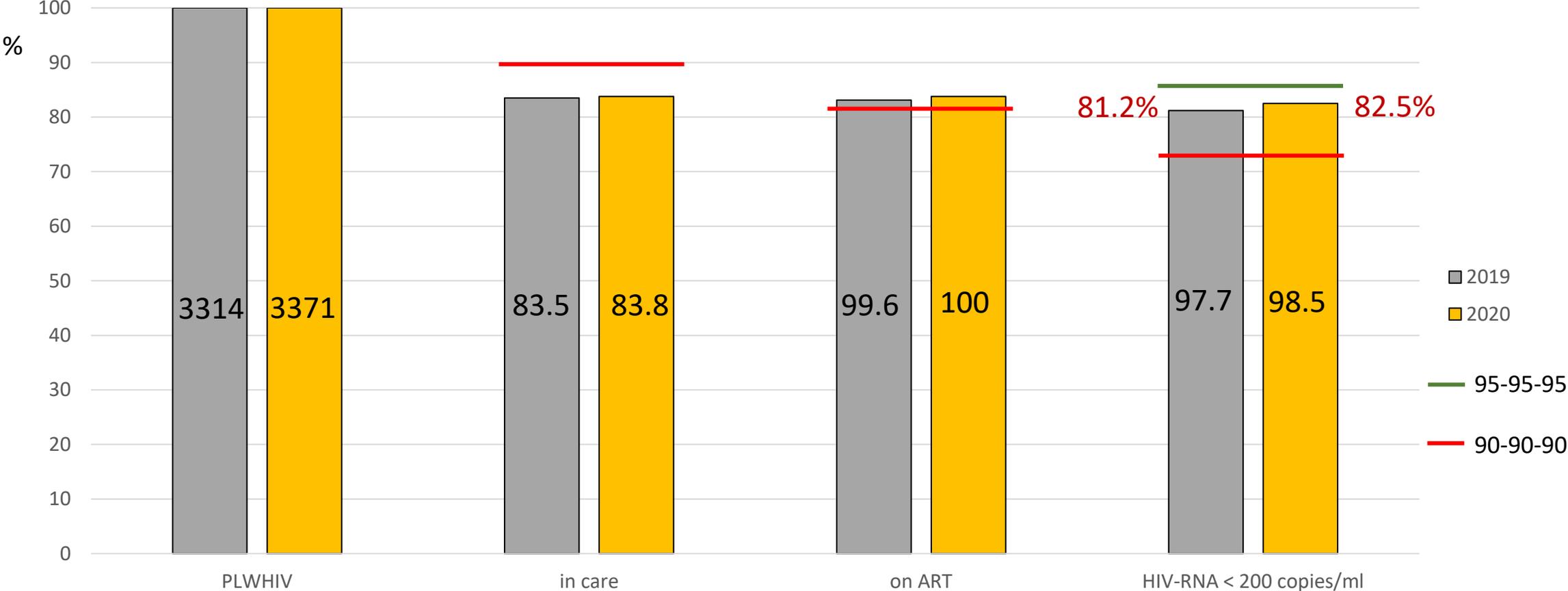
# Methods

- We calculated the number of PLWHIV using the eCDC HIV modeling tool (version 1.3.0) that simultaneously estimates the annual number of newly acquired HIV infections and the size of the undiagnosed population.
- Inputted data covered the period from 1984 to 2020. Data (year of diagnosis, AIDS diagnosis, CD4 at diagnosis, death, HIV-RNA blood level) on the diagnosed and treated populations were derived from the clinical database of the only Provincial Center authorized to treat HIV infection and cross-checked with the Regional administrative data-base.
- Virological response to cART was defined according to the last available HIV-RNA measure. Data from 2019 were compared to those of 2020 to identify possible negative effects of COVID-19 pandemic on the management of chronic HIV infection.

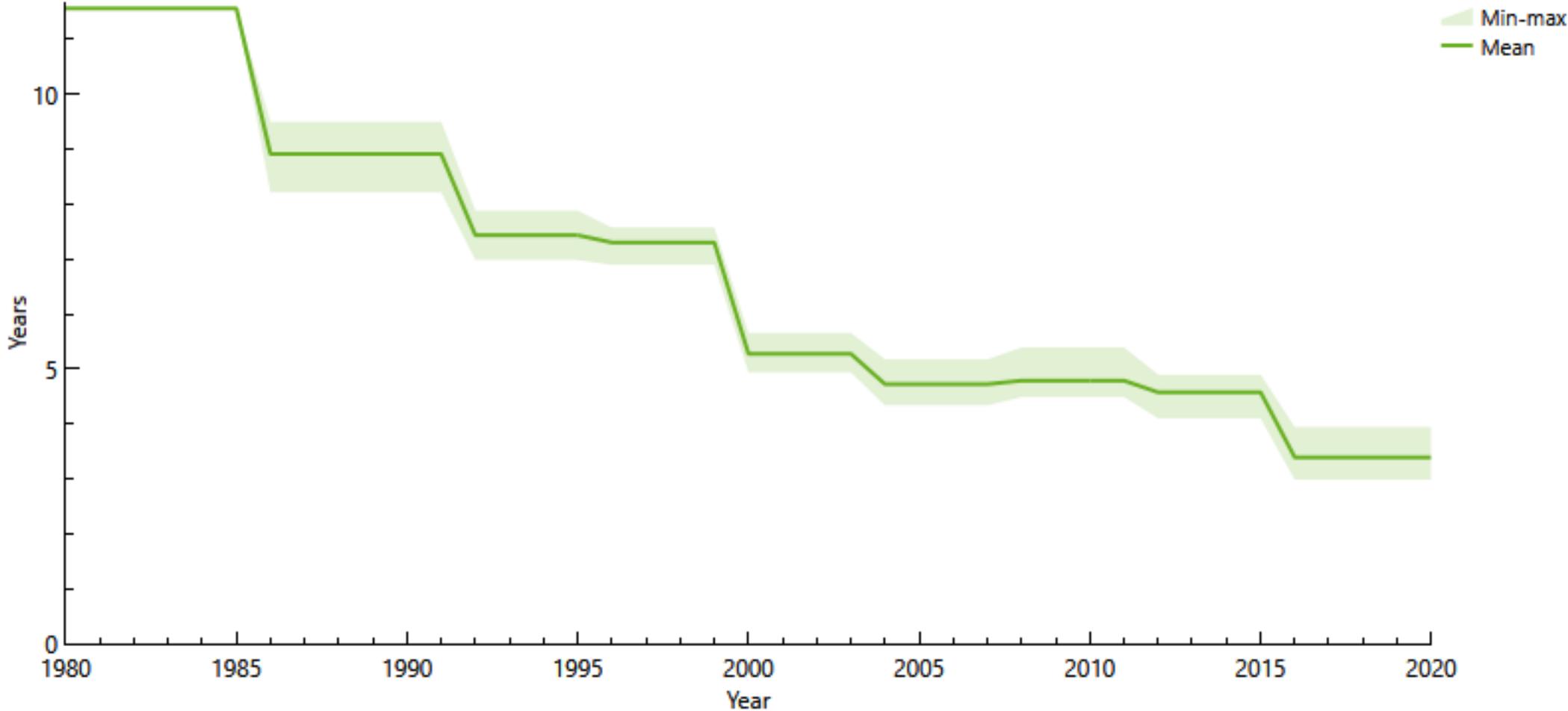
# Total, diagnosed and undiagnosed PLWHIV



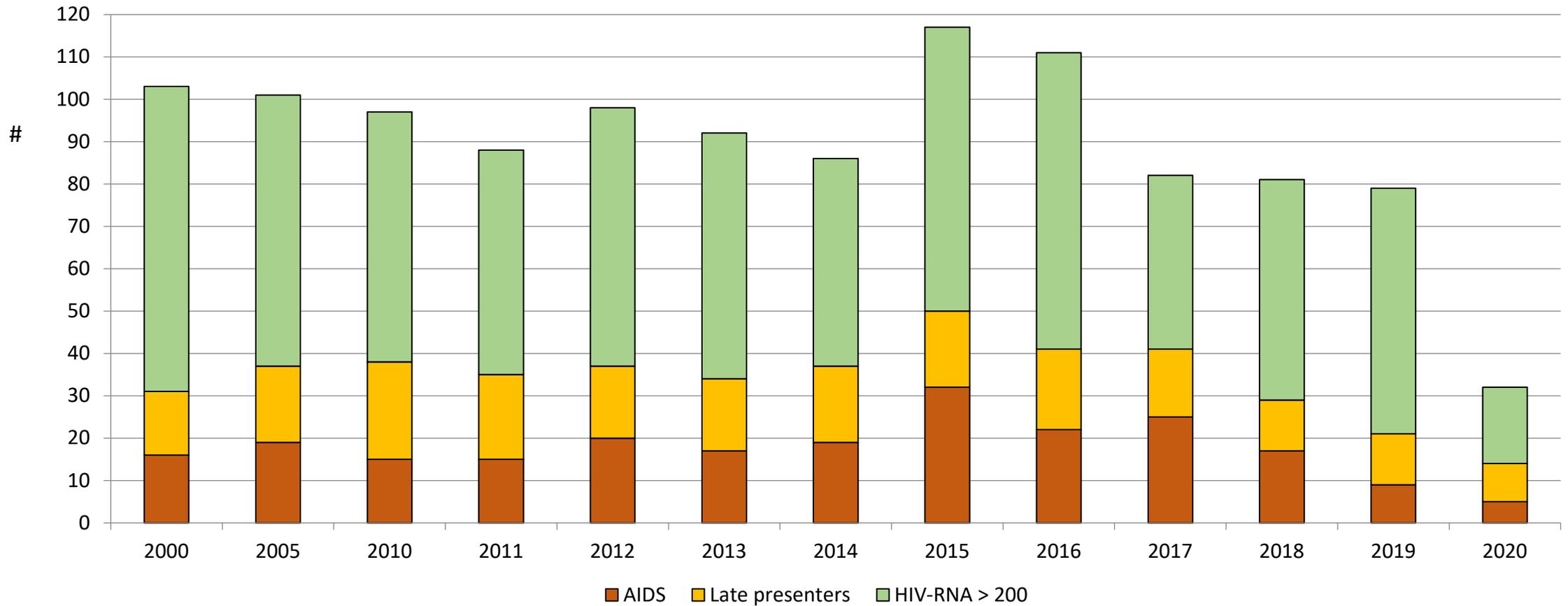
# Cascade of care



# Time to diagnosis



# Number of diagnosis by calendar year



# Conclusions

- The Achille's heel of our cascade of care is still the proportion of PLWHIV who are unaware of their status mostly because they do not perceive they are at risk and do not seek for the test.

However

- The use of an independent check-point referring to a city-wide program named “friendly test” to favor voluntarily testing,
- The switch to alternative methods of clinical management (tele-medicine),
- The implementation of a home-delivery system of ARV drugs,

Allowed us to limit the detrimental effects of COVID-19 and lock-down.

The causes of the reduction in new diagnosis observed in 2020 have still to be clarified