

BACKGROUND

Since 2013, WHO recommends HIV viral load testing (VLT) as the preferred marker to monitor efficacy of antiretroviral therapy (ART). In resource-limited settings, access to HIV viral load (VL) has increased, allowing the “third 90%” of the 90-90-90 UNAIDS goal to be reported. From a clinical point of view, does access to VL really have an impact on the management of PLHIV: appointment spacing for patients with VL<1000 cp/mL, adherence strengthening for patients with VL>1000 cp/mL and 2nd line treatment in case of confirmed failure? We took advantage of the OPP-ERA project, which has enabled the implementation of VL at large scale in Guinea and Burundi, to study these issues.

Funded by UNITAID, the OPP-ERA project aims at increasing access to low-cost VL monitoring through access to Open Polyvalent Platforms (OPPs). The OPP-ERA project, started in 2013, was implemented in 4 countries (Burundi, Cameroon, Guinea and Ivory Coast) by the consortium of actors of the fight against HIV and AIDS: Solthis, Expertise France, Sidaction and ANRS.

METHODS

- Retrospective analyses of database of 4 laboratories located in Burundi and Guinea from 2014 to 2019
- Each database includes repeated measures of viral load collected among people living with HIV (PLWH) receiving ART followed in OPP-ERA laboratories. Other information collected: date of sampling, age, gender, ART regimen (1st or 2nd line), date of ART initiation. No clinical data and no data concerning adherence are available in this database.
- Virological failure was defined by VL>1000 cp/mL
- The management of virological failure was investigated through a retrospective analysis of medical chart of all patients with a documented viral failure from January to June 2018 in ANSS Turiho health facility in Bujumbura and in all available medical charts in Guinea.

RESULTS

- A total of 30,791 patients in Burundi and 18,305 in Guinea on ART (1st line 97%) have benefited from VL test from 2014 to 2019. Overall, the proportion of patients with a VL <1000 cp/mL was 90% in Burundi and 78% in Guinea and has remained stable during the project (figure 1)

Figure 1. Proportion of pts with VL<1000 cp/mL in Burundi and Guinea from 2016 to 2018.

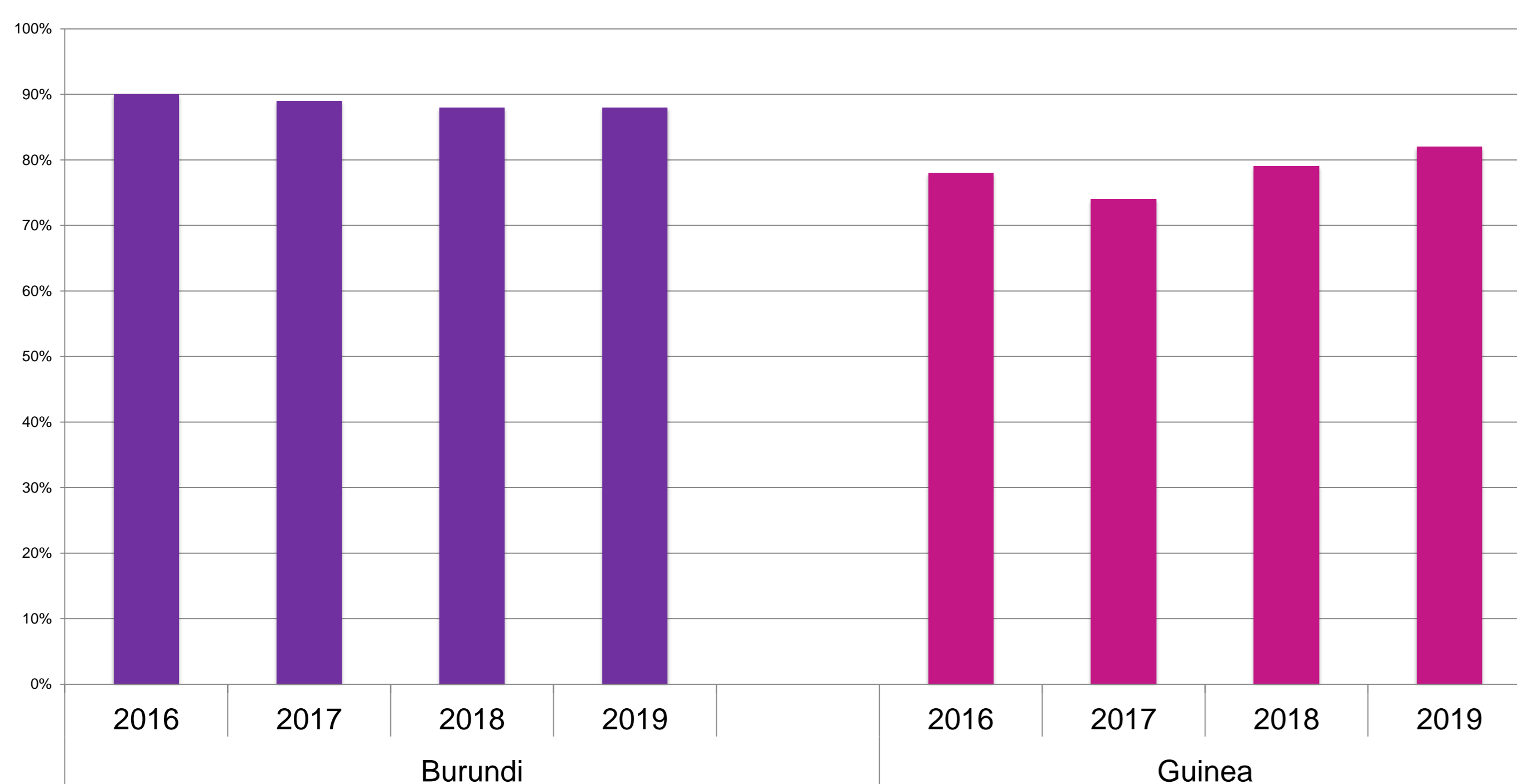
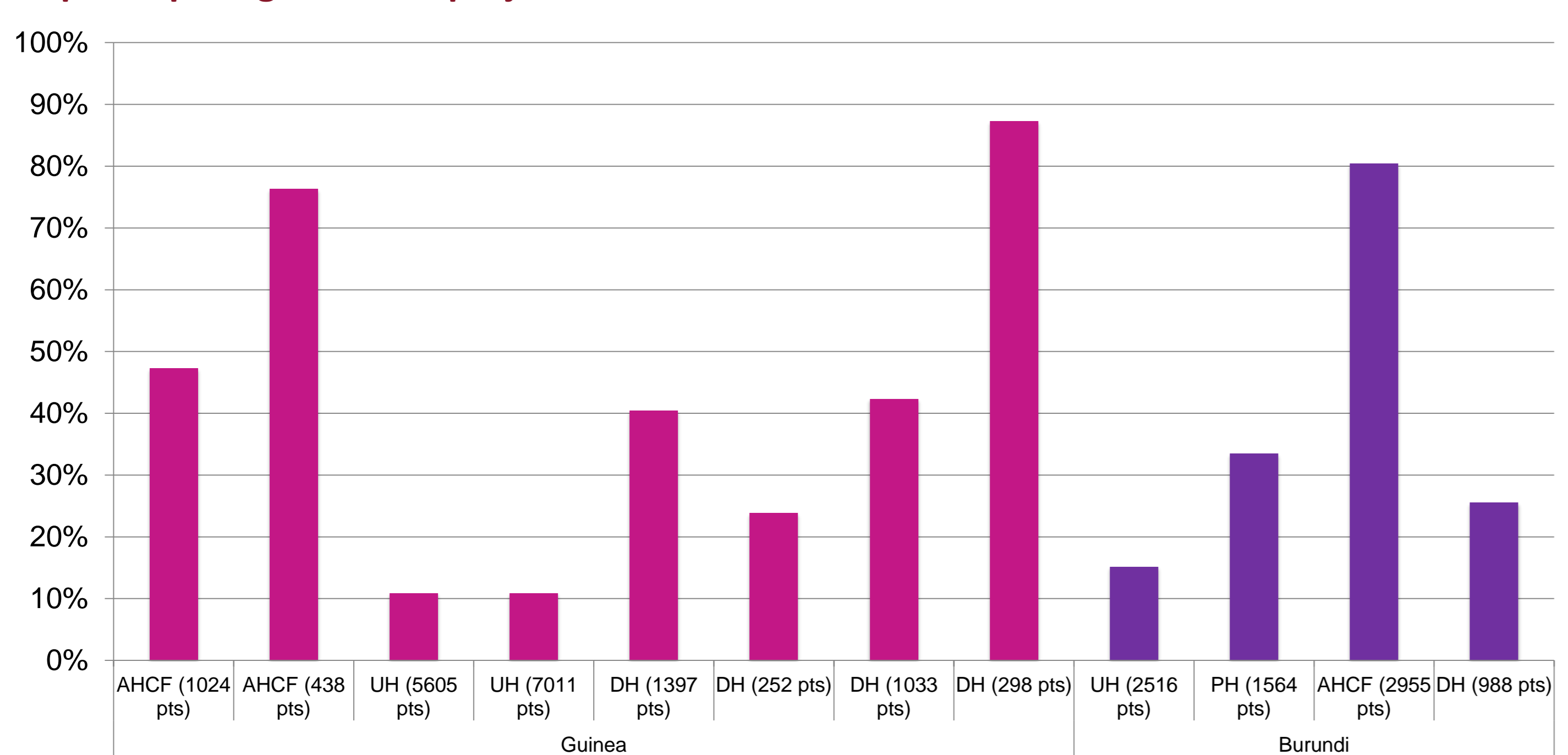


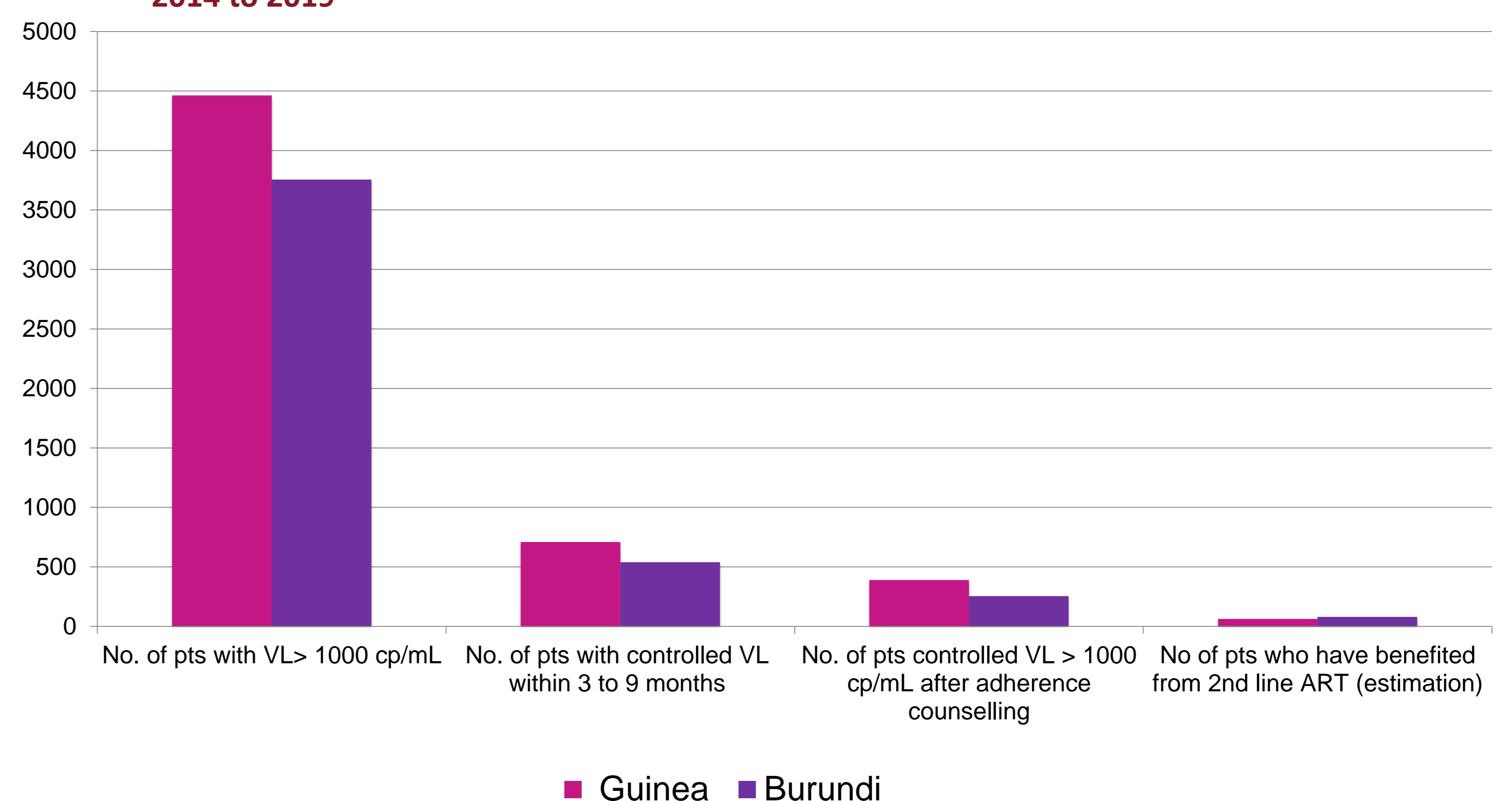
Figure 2. Proportion of pts who access to VL measure in some health facilities participating OPP-ERA project in Burundi and Guinea in 2018.



AHCF: associative health care Facility, UH: University Hospital, DH: district hospital. In bracket: estimated number of patients receiving ART

- The access to VL testing varied considerably among different medical facilities who participated to the project (figure 2).
- The median number of VL test performed by patients was only 1.3 during the 2017-2019 period.
- Spacing of appointment for patients with VL<1000 cp/mL, was incorporated in national guidelines in Burundi and Guinea, but was not implemented in Burundi and only implemented in medical centers supported by MSF in Guinea.
- Of the 3,752 patients in Burundi and the 4,463 patients in Guinea with VL≥1000 cp/mL, control VL was performed for 540 patients (14.4%) in Burundi and 709 (15.9%) in Guinea. Among those, VL control was <1000 cp/mL in 55% patients in Burundi and 48% patients in Guinea reflecting effective adherence strengthening.
- Among patients with control VL≥1000 cp/mL, a sample survey showed that 11/29 patients (38%) in Burundi and 19/119 patients (16%) in Guinea have benefited from a switch to 2nd line.
- Overall, it can be estimated that among patients with a VL≥1000 cp/mL, 10,2% in Burundi and 8.5% in Guinea, have benefited from appropriate management in accordance with national guidelines (adherence intervention and control CV<1000 cp/mL or 2nd line switch) (figure 3).

Figure 3. Cascade of virological failure management in Burundi and Guinea from 2014 to 2019



CONCLUSION

The OPP-ERA project provided access to viral load in many health care facilities in Burundi and in Guinea. However, the proportion of persons living with HIV, followed in health care facilities supported by the OPP-ERA project who benefited from a viral load measurement still needs to be improved. From patient's perspective, the benefit of viral load access remains a challenge, as evidenced by the cascade of virological failure management and the relative stability of the virological success rate over time.

The barriers limiting the prescription of viral load and the use of results should be further explored in order to develop appropriate strategies, so that efforts to deploy VL access lead to improved patient clinical management. For more information on these issues: FRAB1601 Viral Load and Linkage session, Friday 6 Dec 10:45 room Prudence Mabele