# Forecasted demand for current and new ARV medicines in low and middle income countries, 2014-2025

J Perriëns (WHO), S Juneja (MPP) and V Prabhu (CHAI) on behalf of the WHO ARV Forecasting Technical Working Group

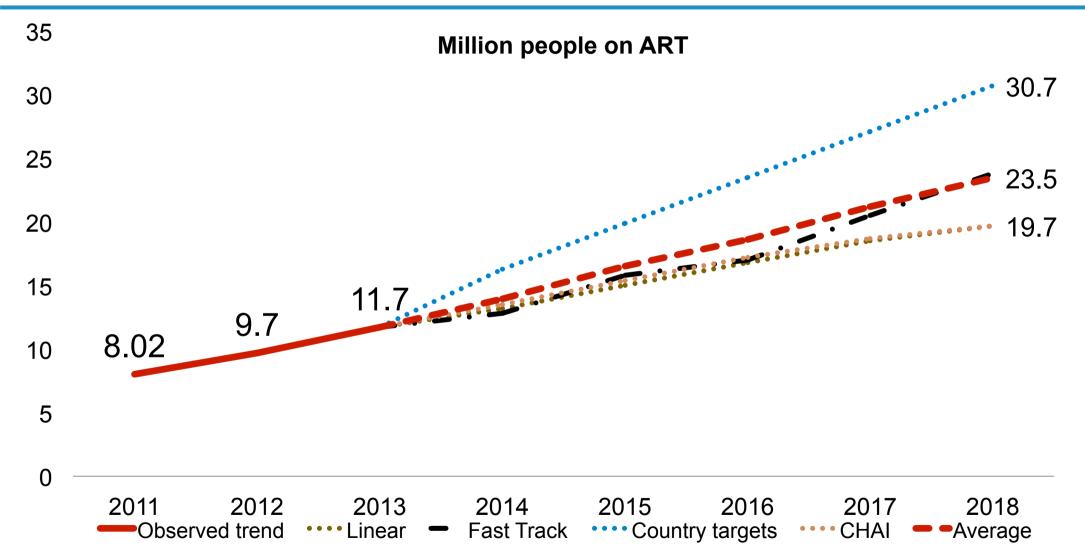
(Avenir Health, CDC, CHAI, GFATM, MPP, PfSCM, UNAIDS, UNICEF, USAID, WHO)







### Observed trends and projected number of people on ART according to Linear, Fast Track, Country Target Projections, and Average of 4 Projections

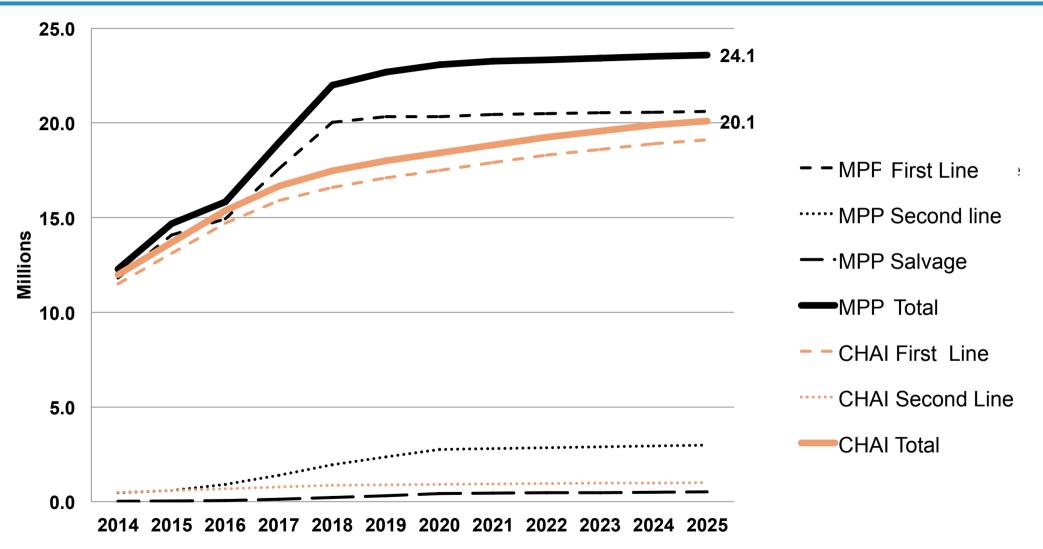








#### Millions of Adults Treated in MPP and CHAI scenarios



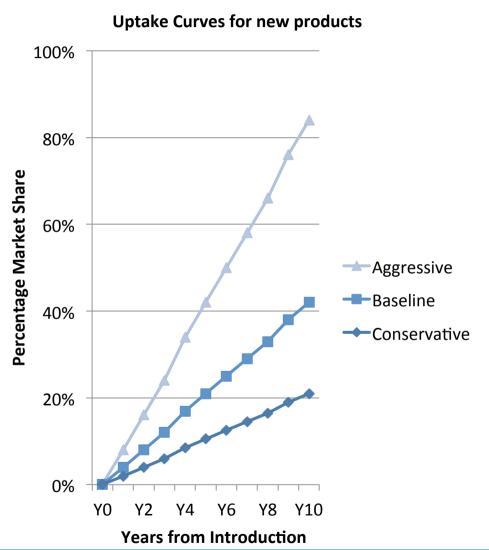


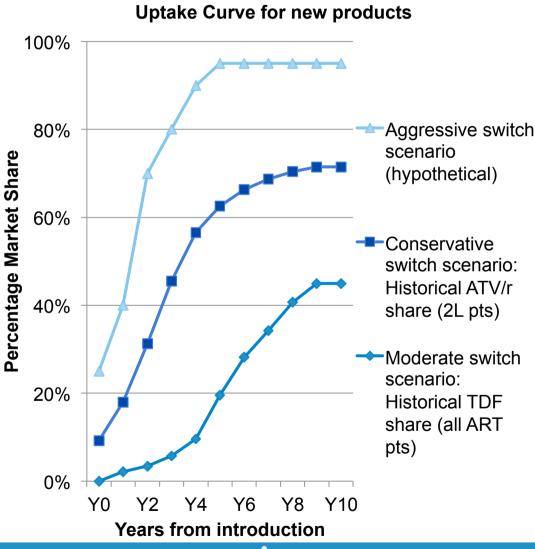




### Uptake curves WHO/MPP

#### **CHAI**











#### **Drugs included**

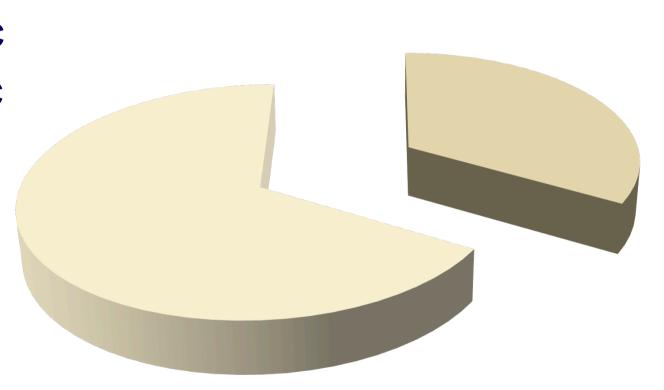
#### **Backbone:**

TDF+ XTC

**TAF+ XTC** 

**ZDV+XTC** 

**DTG** 



#### **Companion:**

**EFV, NVP** 

**DTG** 

LPV/r

ATV/r

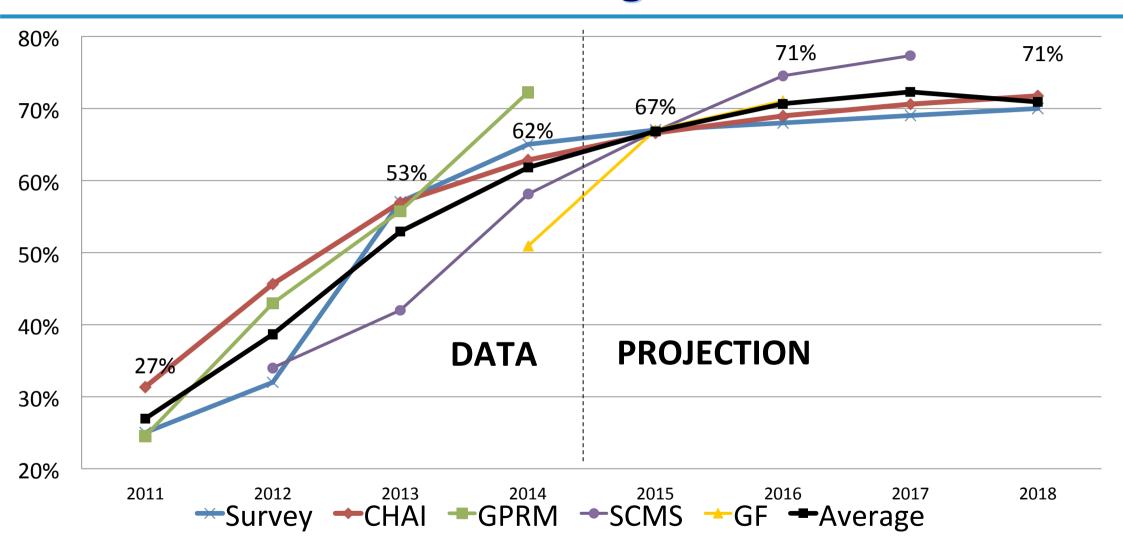
DRV/r







# TDF+XTC % market share in backbone of treatment regimens

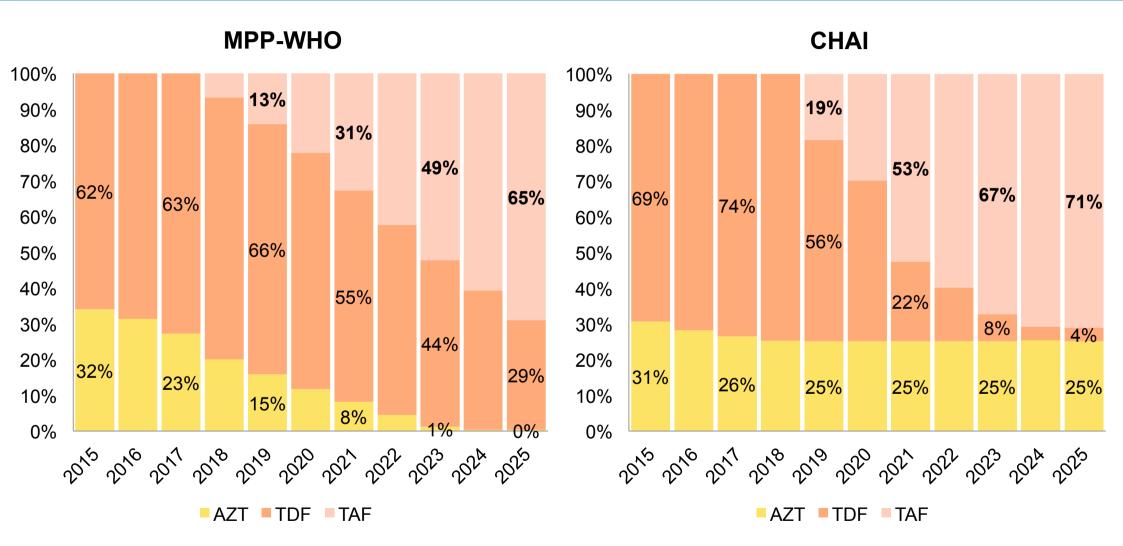








# Percent of people on first line treatment taking TAF, TDF and ZDV

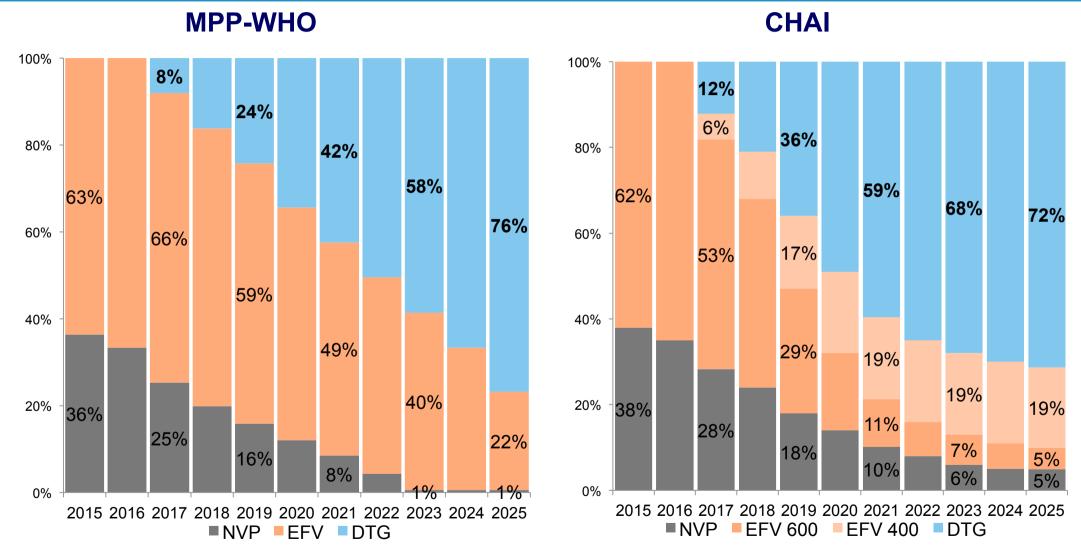








### Percent of people on first-line treatment taking DTG vs. EFV vs. NVP

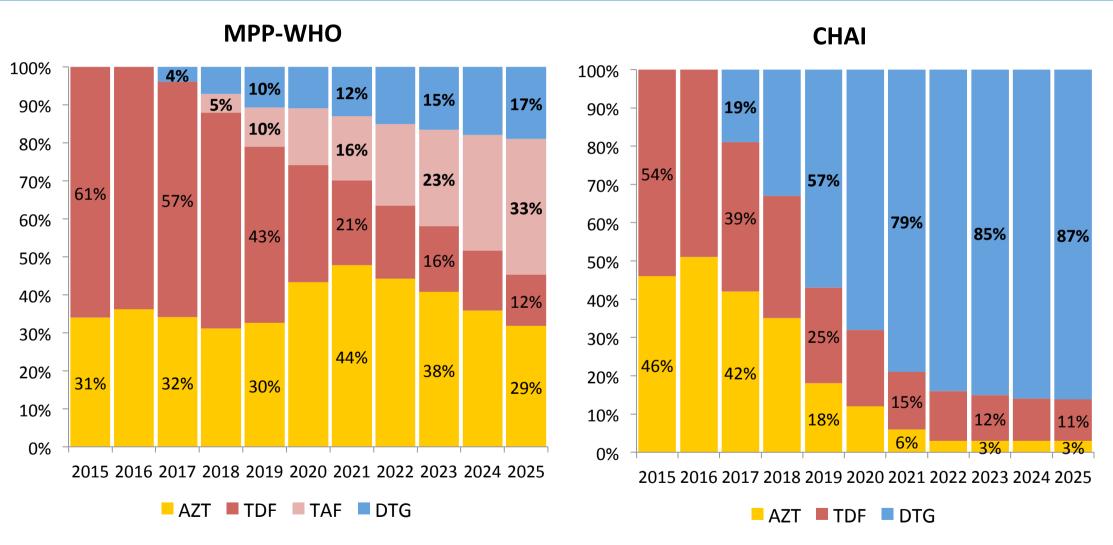








# DTG, AZT, TDF, and TAF/XTC in backbone of second-line treatment

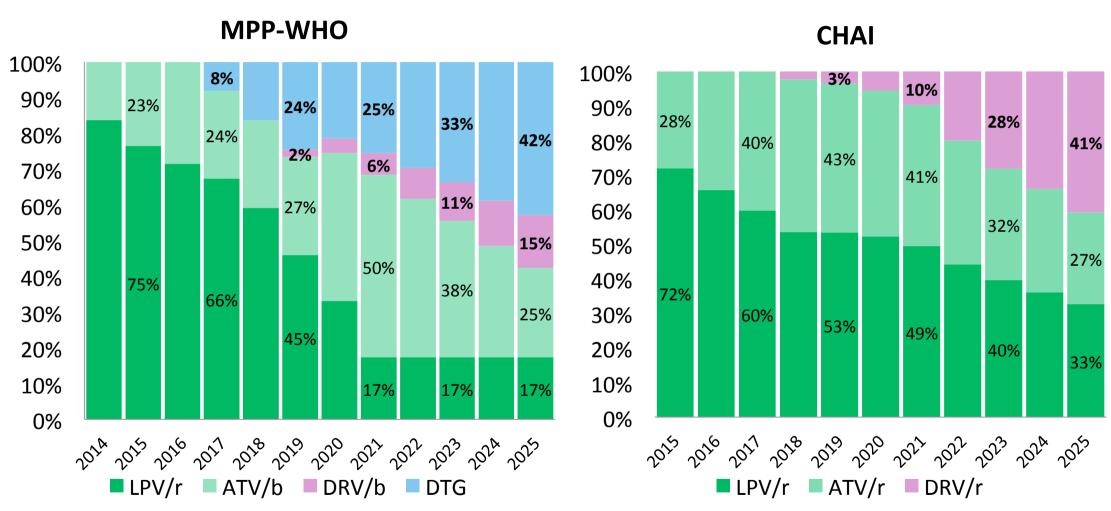








# Protease inhibitors and DTG as companion drugs in second-line treatment



Note: DRV/r uptake highly dependent on reaching "at-scale" pricing parity with LPV/r, and likely cost offsets for (re)launch prices



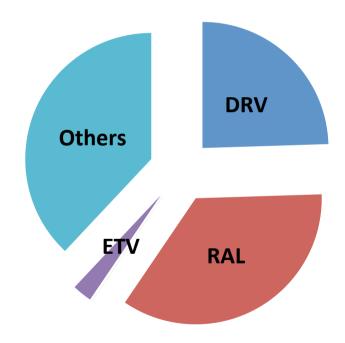




#### Main products used in salvage treatment

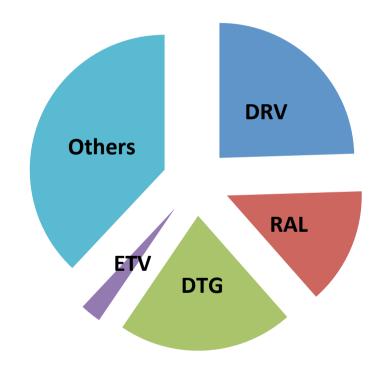
**Usage in Resistant Patients: 2015** 

N = 25.900



**Usage in Resistant Patients: 2025** 

N = 506.700

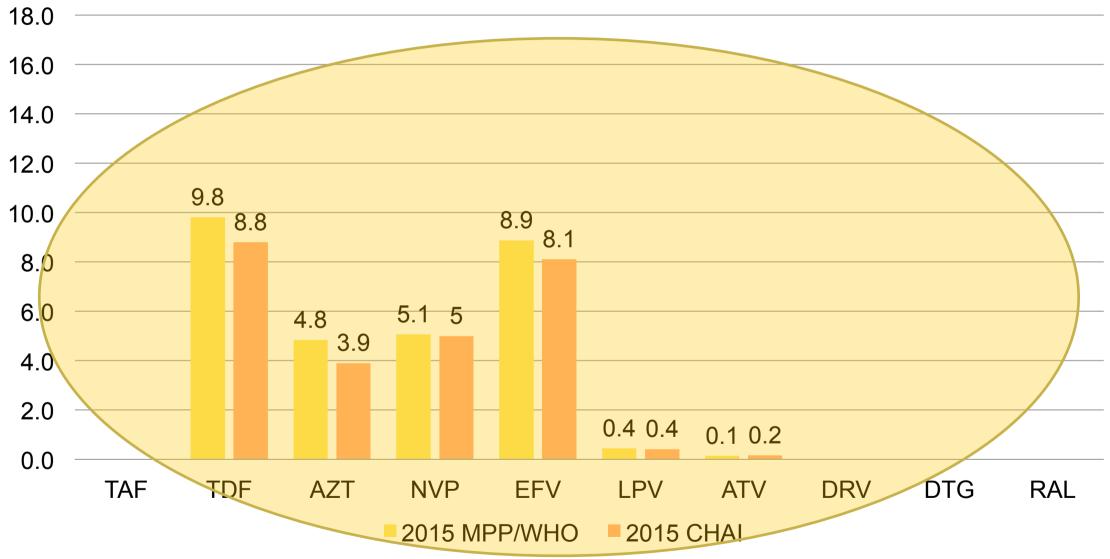








### ARV use in 2015 - Million People by **Active Ingredient**

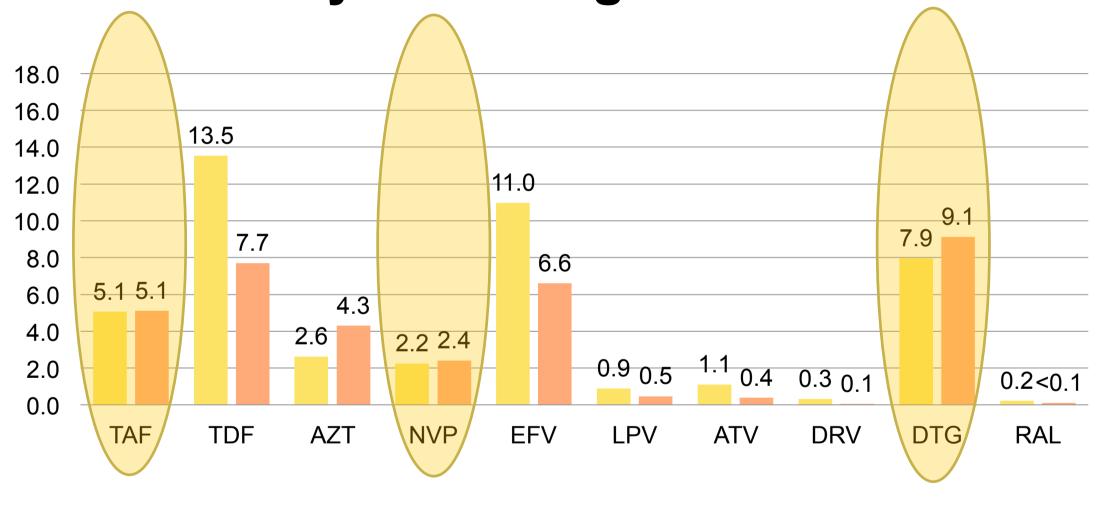








# ARV use in 2020 - Million People by Active Ingredient



2020 MPP/WHO

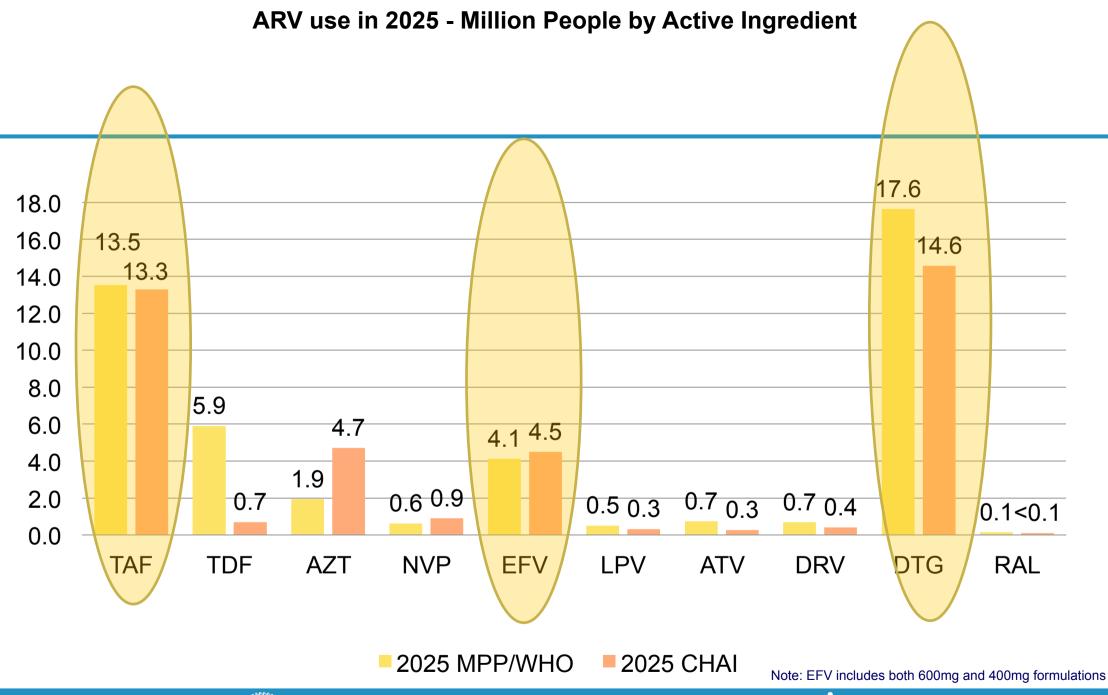
Note: EFV includes both 600mg and 400mg formulations





2020 CHAI











#### Conclusion



- Our forecasts include a mix of judgement and data
- Areas of convergence are useful to inform action
- Until more data become available, production of the current generation of ARVs needs to continue, and increase, to ensure that all necessary drugs will remain available.



