

Antiretroviral therapy (ART), immune response and clinical outcomes among children and young people seen for paediatric HIV care in England in 2022-2023



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BACKGROUND

- The number of children and young people living with HIV in England continues to decline.
- Ongoing surveillance of this population is important to optimise health and care outcomes.
- The **Children's HIV and AIDS Reporting System (CHARS)** collects health and clinical care data on all children and young people seen for paediatric HIV care in England until transition to adult care (on behalf of NHS England).
- We aimed use CHARs data to **describe HIV-related outcomes for children and young people seen for paediatric HIV care in England** in recent years.

METHODS

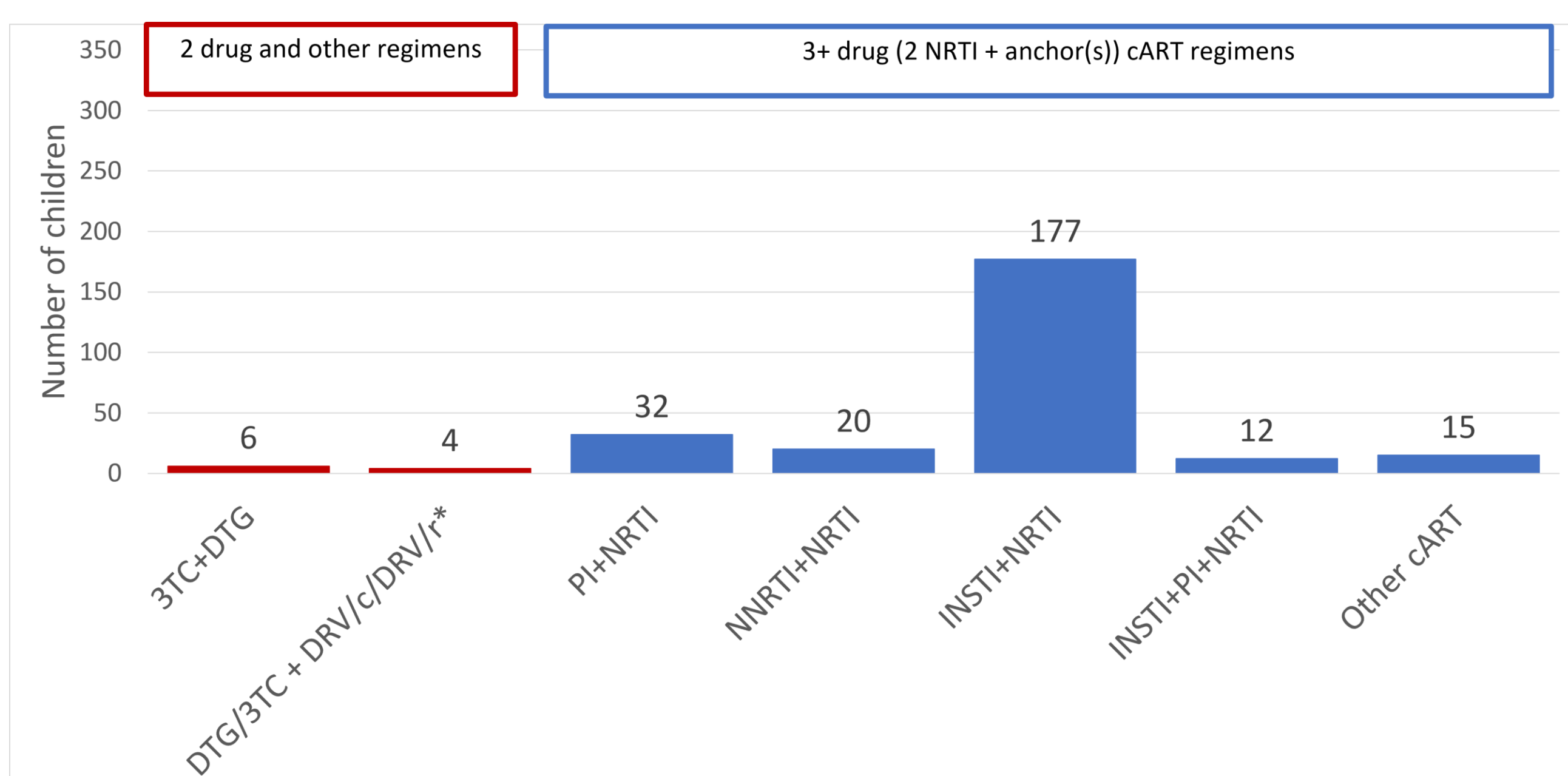
- Analyses included children and young people in CHARs in active paediatric HIV care at last report, with a report received between January 2022 to June 2023.

- Definitions**
- Undetectable HIV viral load:** ≤ 200 copies/mL, per BHIVA guidelines
- Immunological status:**
 - Stage 1:** $\geq 1,500$ cells/mm³ if < 1 year, $\geq 1,000$ if < 6 years, and ≥ 500 if ≥ 6 years
 - Stage 2:** 750-1,499 cells/mm³ if < 1 year, 500-999 if < 6 years, and 200-499 if ≥ 6 years
 - Stage 3:** < 750 cells/mm³ if < 1 year, < 500 if < 6 years, and < 200 if ≥ 6 years, per CDC paediatric HIV CD4 cell count infection categorisation

RESULTS

- Of 270 children and young people in active paediatric HIV care, 98.5% (266/270) were on ART at their last appointment. Most (96.3%) of those on ART were on a ≥ 3 drug regimen (Figure 1).
- 31.6% of those on ≥ 3 drug regimens were on Triumeq (ABC+3TC+DTG).**

Figure 1. ART regimen at last reported follow-up (Jan 2022 – June 2023) among 266 children and young people on ART



*Ritonavir and Cobicistat, included as booster drugs as part of a combination with DTG or 3TC and DRV, were not counted as individual drugs.
*Other cART regimens include NRTI+NtRTI+INSTI, NRTI+NNRTI+NtRTI, NRTI+PI+NtRTI+INSTI, NRTI+NNRTI+PI+NtRTI, and NRTI+NNRTI+PI+NtRTI

RESULTS (cont.)

Key demographics	% among those in active paediatric care
Median age at last follow up	15 years
Median age at diagnosis	2.1 years
Female	52.8%
Born outside the UK	41.0%
Black African	74.8%
Acquired HIV vertically	93.7%

- A recent **viral load** was available for 260 of 266 children and young people on ART.

93.5% undetectable viral load

Higher viral loads among older age groups (Figure 2)

4.2% had viral load > 1000 copies/mL

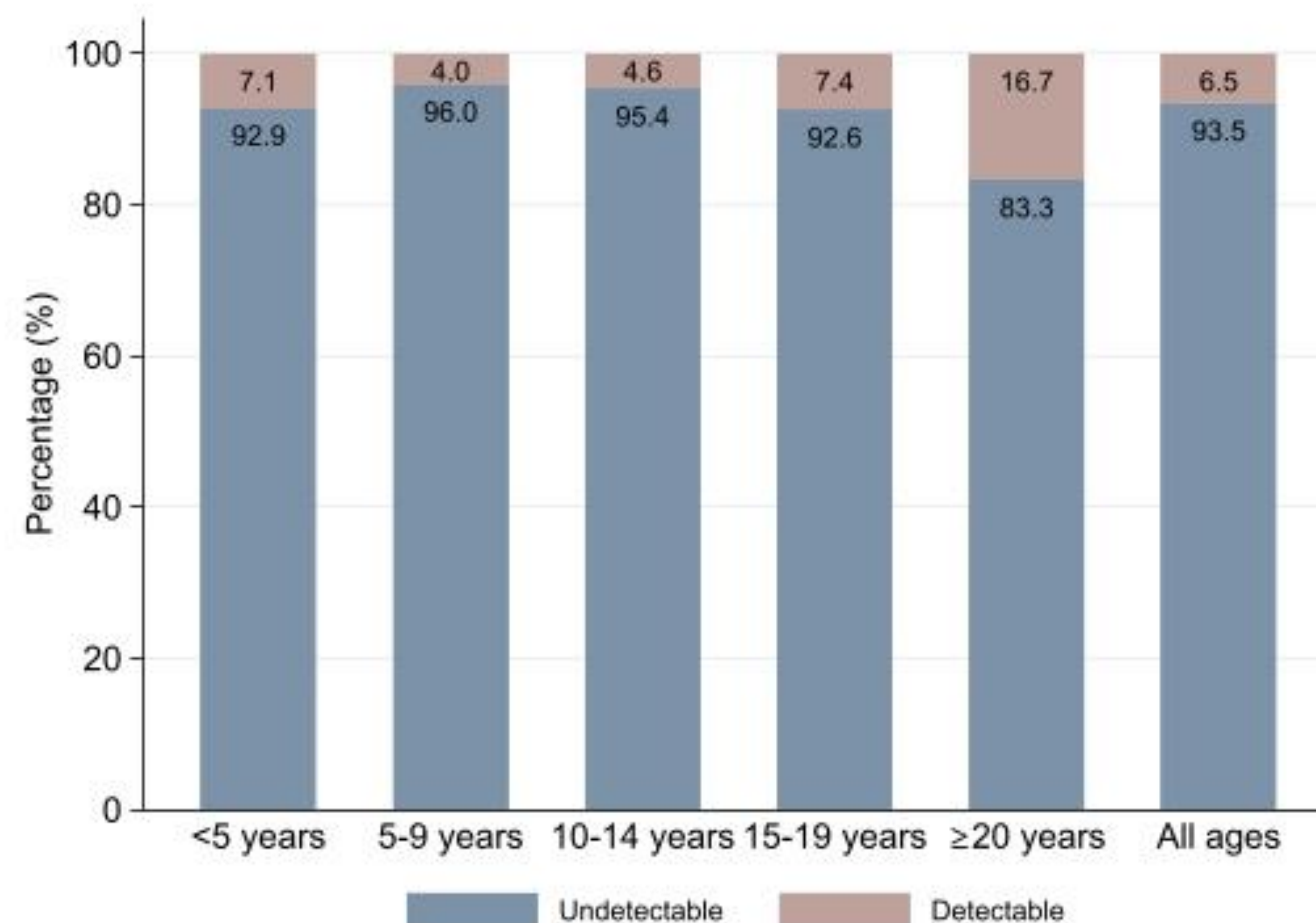
- A **CD4 count** measurement was available for 259 of 266 children and young people on ART.

81.9% Stage 1 infection

16.2% Stage 2 infection

1.9% Stage 3 infection

Figure 2. Viral load at last reported follow-up among 260 children and young people on ART 2022-2023, by age group



CONCLUSIONS

- Clinical markers among children and young people in active paediatric care in England seen in 2022-2023 are reassuring, with nearly 90% virologically suppressed and 80% with Stage 1 immune status.
- Nearly all children and young people are on some form of ART, with most on a ≥ 3 drug regimen, such as Triumeq (ABC+3TC+DTG).
- National surveillance of children and young people accessing paediatric HIV care remains vital to ensure unique needs of this population are met.

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