Background

- Incidence of mother-to-child HIV transmission has declined to <0.3% among diagnosed HIV-positive pregnant women delivering in the UK and Ireland (UK/I)
- An increasing proportion of children diagnosed with HIV in the UK/I were born abroad.

Aims

- To describe trends in the characteristics of children at time of HIV diagnosis in the UK/I from 2000-2015.
- To project the number of patients entering/remaining in paediatric HIV care up to 2020 to inform future service needs.

Methods

- All children (<16y) diagnosed with HIV in the UK/I (those born in UK/I and those born abroad arriving with known or unknown HIV status) are reported to the National Study of HIV in Pregnancy & Childbirth (NSHPC) through an active surveillance system.
- Children receiving paediatric HIV care are followed up in the Collaborative HIV Paediatric Study (CHIPS). Datasets from the two studies were linked for this analysis.
- Among children with prior antiretroviral treatment (ART) at entry to the UK/Ireland, we describe the response to treatment at 1 year after entry.
- Projections of the size of the population in paediatric HIV care up to 2020 was based on current numbers/age distribution of children in follow-up in CHIPS. Age-specific probability of entry/exit paediatric care was based on historical averages (2011-14). Annual numbers of new entry to CHIPS were based on a proportion of the cohort size or a fixed constant number based on the 4-year historical average.

Results

- 1528 children were diagnosed as HIV-infected in UK/I from 2000-2015 (born 1984-2015), 65% were born abroad (Figure 1).
- Children born abroad were older at time of diagnosis (Table 1).
- Age at diagnosis declined over time, irrespective of place of birth
  - Children born abroad: median ages were 6y [3y, 9y], 4.7y [2y, 7y] and 3y [2y, 3y] respectively.
- Proportion of children with ART at diagnosis declined significantly from 26% in diagnoses 2000-03 to 2% in 2012-15. Proportion with CDC B symptoms also fell from 34% to 11% respectively (p<0.001).

Conclusions

- As the CHIPS cohort matures, an increasing proportion of patients are transferring to adult care.
- Assuming the numbers of new patients entering paediatric HIV care continue to decline or remain at a constant average, it is estimated that the cohort will halve in size by 2020.