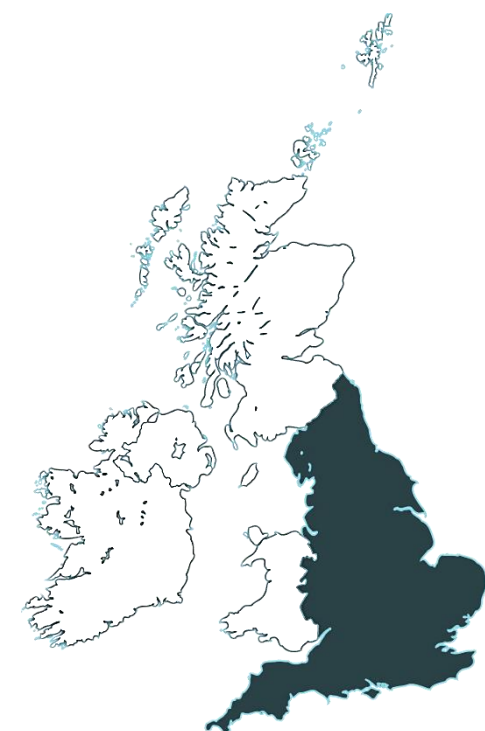




INTRODUCTION

Late HIV diagnosis is related to poor prognosis, delayed ART initiation, and early death (1,2).



We assessed the risk factors associated with late HIV diagnosis and other HIV health outcomes (AIDS at HIV diagnosis and mortality) among people newly diagnosed with HIV in England during the 2011-2020 period.

DEFINITIONS

- AIDS at HIV diagnosis:** the presence of one or more clinical AIDS-defining illnesses within 91 days of HIV diagnosis
- ART status:** taking any of the ART available in the UK
- IVDU:** Intravenous drug use
- Late HIV diagnosis:** having a CD4 count <350 cells/mm³ within 91 days of the first HIV diagnosis in the UK and no evidence of recent seroconversion
- Migrant:** people born outside the UK
- NA:** North America
- NR:** Not reported
- Retention in care:** any attendance at HIV specialist care in two consecutive years
- Viral suppression:** having less than 200 HIV copies per millilitre of blood

METHODS

Data source

- The HIV and AIDS New Diagnoses and Deaths Database
- The HIV and AIDS Reporting System*

Population

- Adults newly diagnosed with HIV (aged 15 years and over) in England
- Those with evidence of recent seroconversion were excluded

Statistical analysis

- Sociodemographic, epidemiological, and clinical characteristics related to HIV outcomes were analysed by multinomial and binary logistic regression
- A sensitivity analysis was performed due to the significant number of records with missing information (19.7%)

*Figures might vary slightly from the latest published UKHSA figures due to delayed reporting

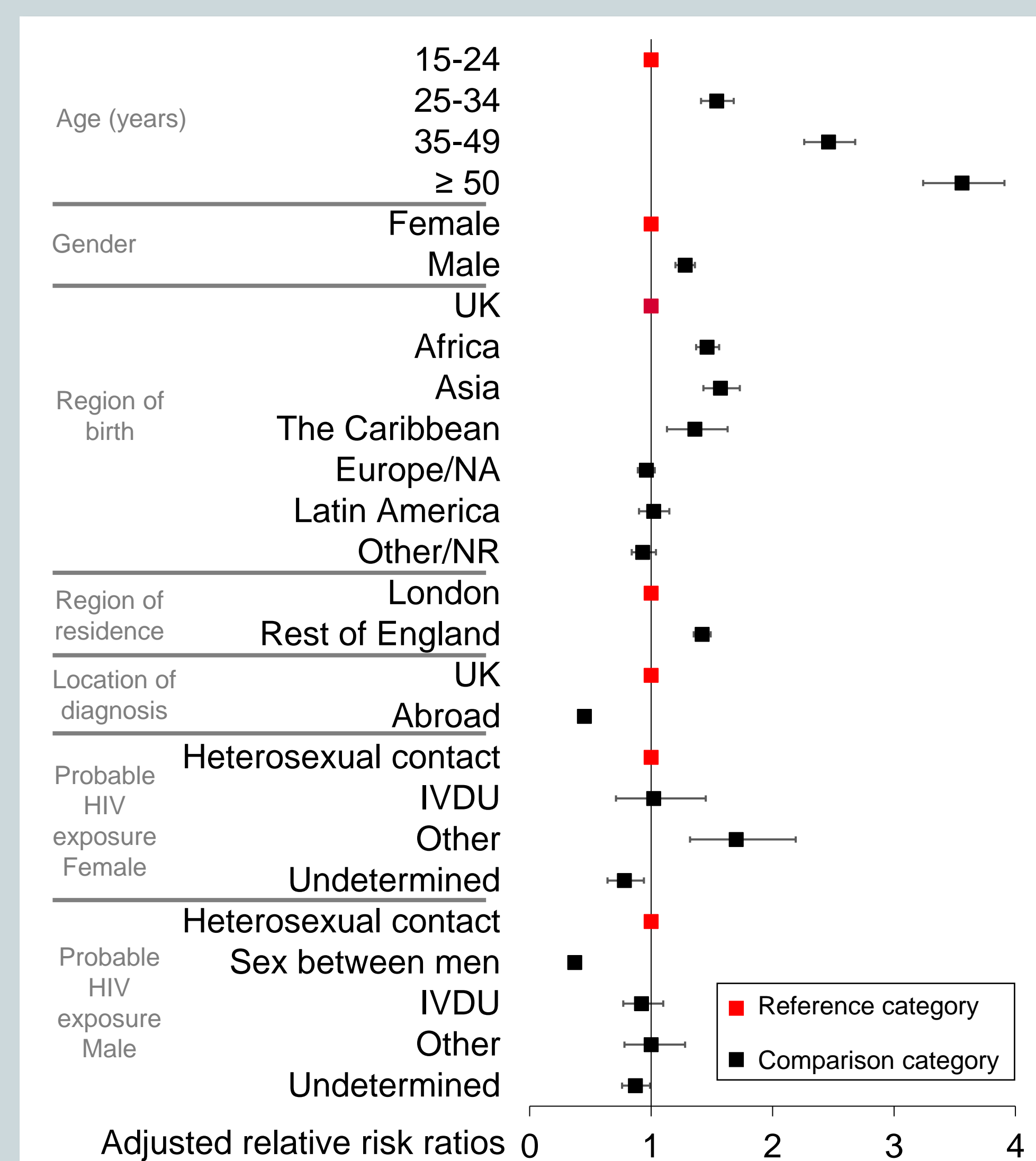


Figure 1. Risk factors for late HIV diagnosis among newly diagnosed people in England from 2011 to 2020.

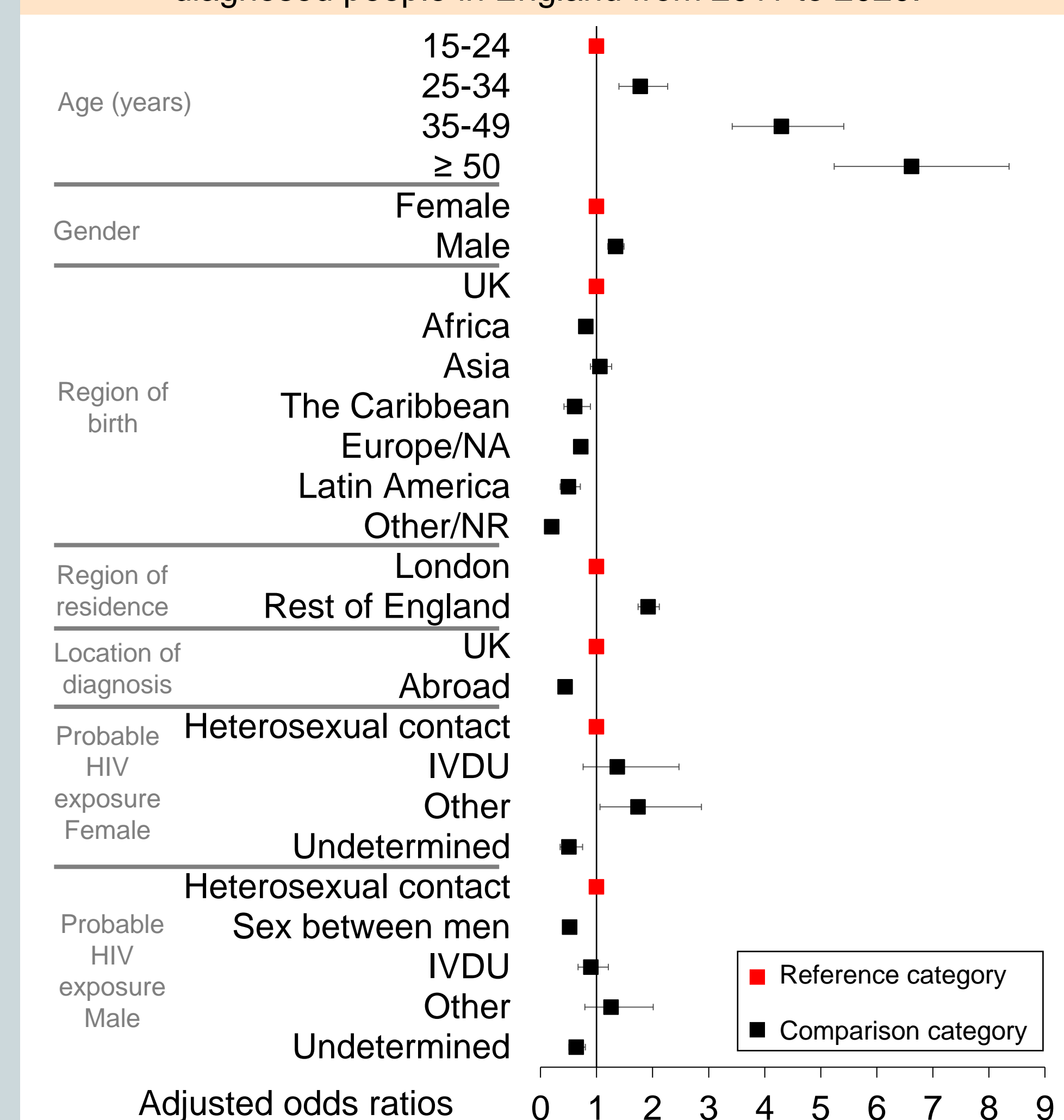


Figure 2. Risk factors for AIDS at HIV diagnosis among newly diagnosed people in England from 2011 to 2020.

RESULTS

From 2011 to 2020, **47,828 new HIV diagnoses** were reported in England, with almost a third (**29.2%**) diagnosed late.

Around half of new HIV diagnoses (**52.0%**) and over half of the late diagnoses (**57.3%**) were reported in **migrants**.

A small proportion of newly diagnosed people were diagnosed with **AIDS at HIV diagnosis (5.1%)** and **died** during the ten-year follow-up (**4.2%**).

Factors associated with a late diagnosis are as follows (Fig. 1):

- Male gender** (aRRR: 1.28; 95%CI: 1.20–1.36)
- > 50 years** (aRRR: 3.56; 95%CI: 3.24–3.91)
- Being born in Africa** (aRRR: 1.46; 95%CI: 1.37–1.56)
- Being born in Asia** (aRRR: 1.57; 95%CI: 1.43–1.73)
- Being born in the Caribbean** (aRRR: 1.36; 95%CI: 1.13–1.63)
- Living outside of London** (aRRR: 1.42; 95%CI: 1.35–1.49)

Results were similar for AIDS at HIV diagnosis (Fig. 2). In general, **migrants were less likely to die** over the ten-year period than UK-born residents (Fig. 3).

The number of **new HIV diagnoses and late diagnoses diminished** over this time among all residents (UK and non-UK born) except for **Latin American migrants** (Fig. 4).

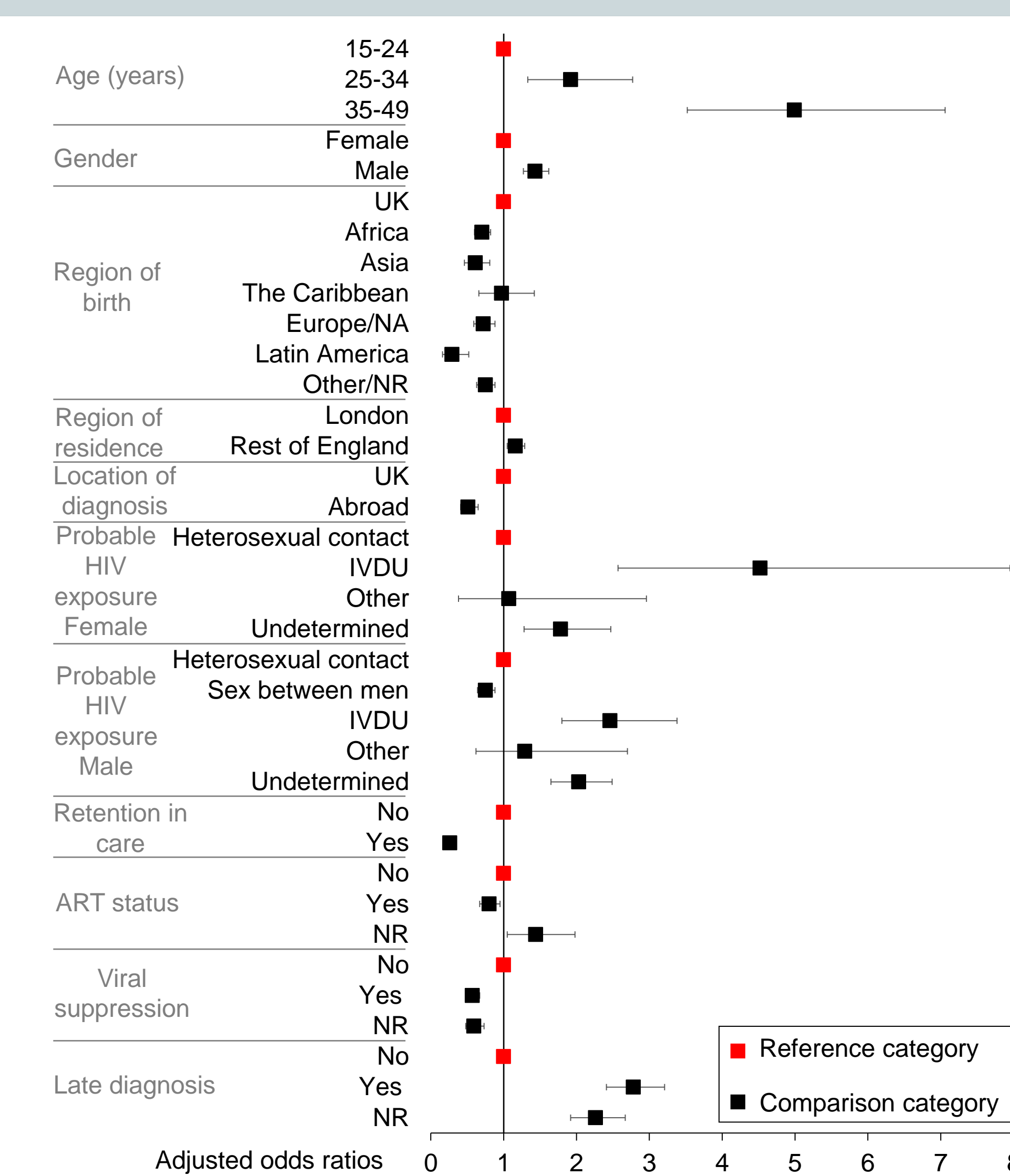


Figure 3. Risk factors for death among newly diagnosed people in England from 2011 to 2020.

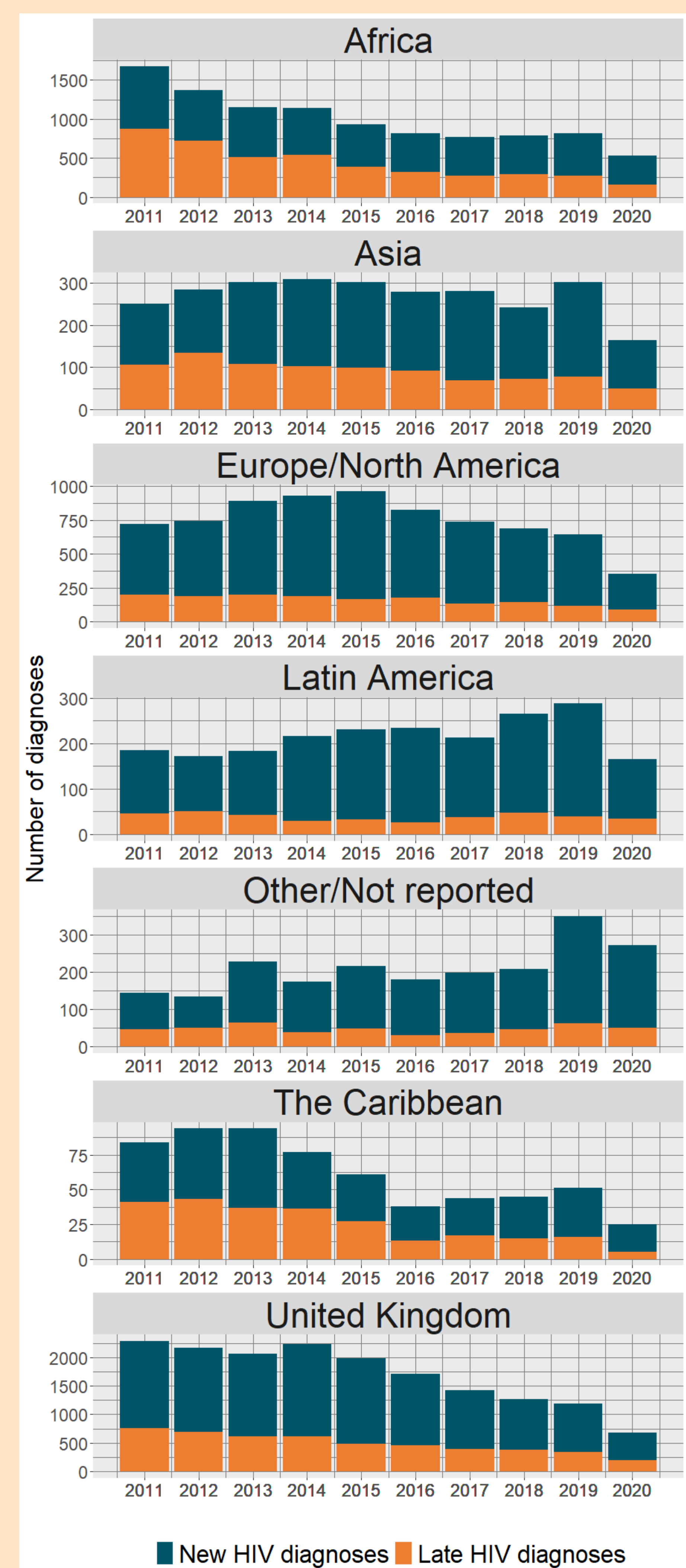


Figure 4. Number of new HIV diagnoses and late diagnoses by region of birth in the 2011-2020 period in England.

LIMITATIONS

The migrant definition is not ideal since it ignores the spectrum and complexity of migratory movements (3).

Data completeness is suboptimal. Half of the variables (7 out of 14) have missing values. The proportion of missing values ranged from 8.5% to 39.1% (length of stay in England).

Including all-cause mortality is also problematic. A time-to-event analysis should be performed to better understand death differences among groups.

Social variables (e.g., employment status, socioeconomic status, acculturation level) and ethnicity were not included in the analysis since they were not available in the datasets.

This study highlights the **importance of the migrant community** in HIV epidemiology in England. Not only were **most new HIV diagnoses** in 2011-2020 among migrants, but also the **proportion of new diagnoses** in this community **has increased** (from 58.6% in 2011 to 71.8% in 2020) (4).

There is strong evidence suggesting **no difference in late diagnosis likelihood** between Latin American/European/NA and England residents. However, **African, Asian, and Caribbean migrants** are more likely to be diagnosed late than their England counterparts.

DISCUSSION

The **migration process** disrupts previously established social and sexual networks, **increasing the likelihood of HIV exposure** (5). Furthermore, migrants are more likely to adopt **riskier behaviours** than locals (6).

Barriers to accessing the healthcare system (e.g., language, accessing testing), **discrimination**, and **stigmatisation** are additional factors that **might increase the risk of poor HIV outcomes** (7).

CONCLUSIONS

England is successfully reducing undiagnosed HIV, but **greater efforts are necessary** to accomplish the 2030 zero HIV transmission goal (8).

The **migrant community** (particularly Latin American migrants) must be **included in future public policies** and categorised as an **HIV key population** in England.

Future research

A natural progression of this work is to analyse the migrant population by country of birth, integrate additional sociodemographic factors (e.g., acculturation levels), incorporate diverse ethnic groups, and examine the long-term implications of the COVID-19 pandemic on the HIV epidemiology in the UK.

References & e-Poster

