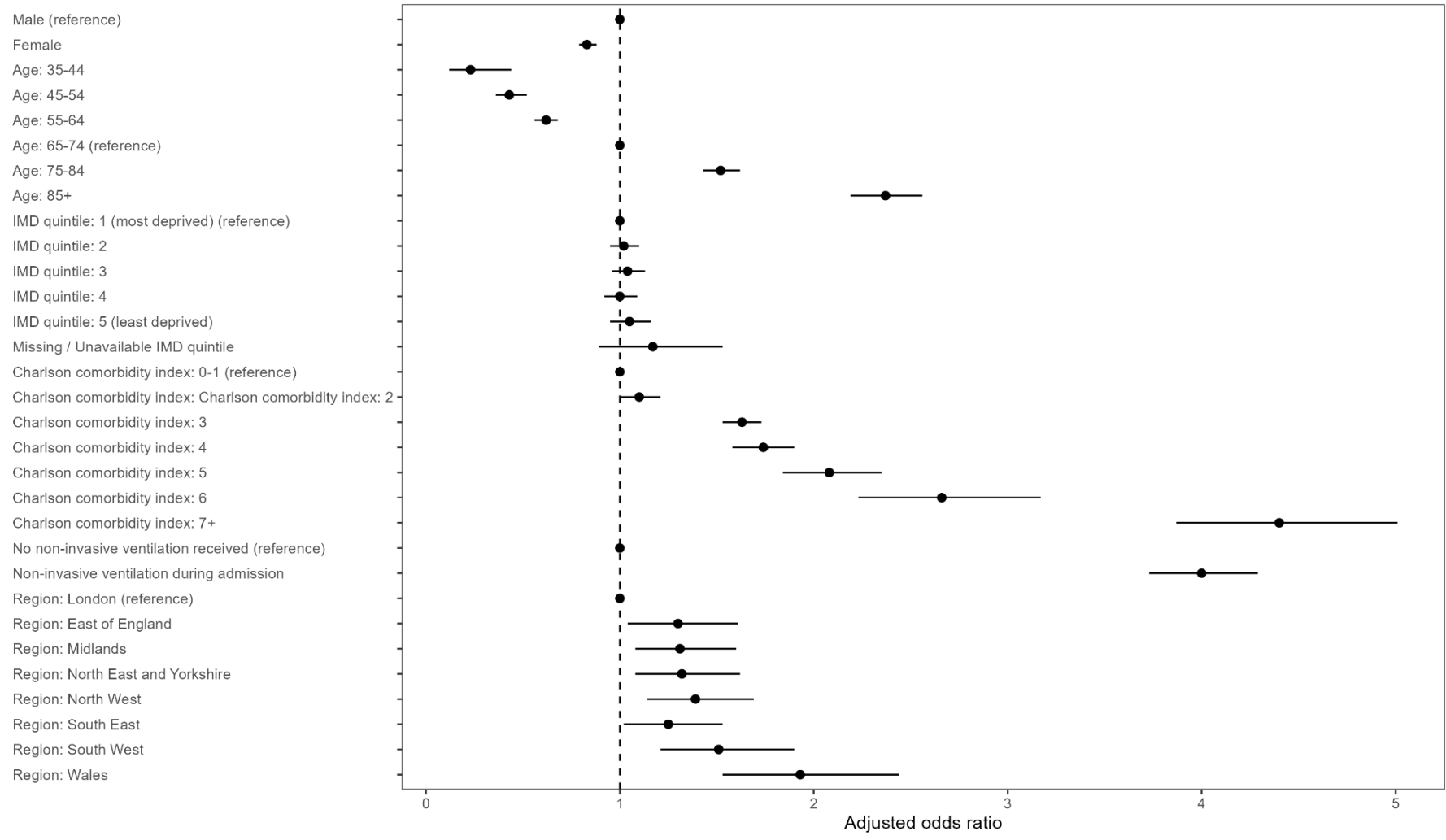# Outcomes (2021-23): COPD forest plots

A forest plot is a simple chart used to show the results of a statistical analysis. In this case, it displays the odds ratios from the adjusted regression models assessing mortality and readmission within each audit stream, showing how different variables (age, sex etc) are linked to the outcome.

Each line represents a variable level, with a dot for the estimated effect and a horizontal line showing the range of uncertainty (95% confidence interval). This makes it easy to see which variables increase or decrease the odds of the outcome and how precise those estimates are. If the confidence intervals cross '1' then there is no evidence of an effect of that variable on the outcome. For categorical variables, the reference category odds ratio is 1 by definition and the other categories are compared to this.
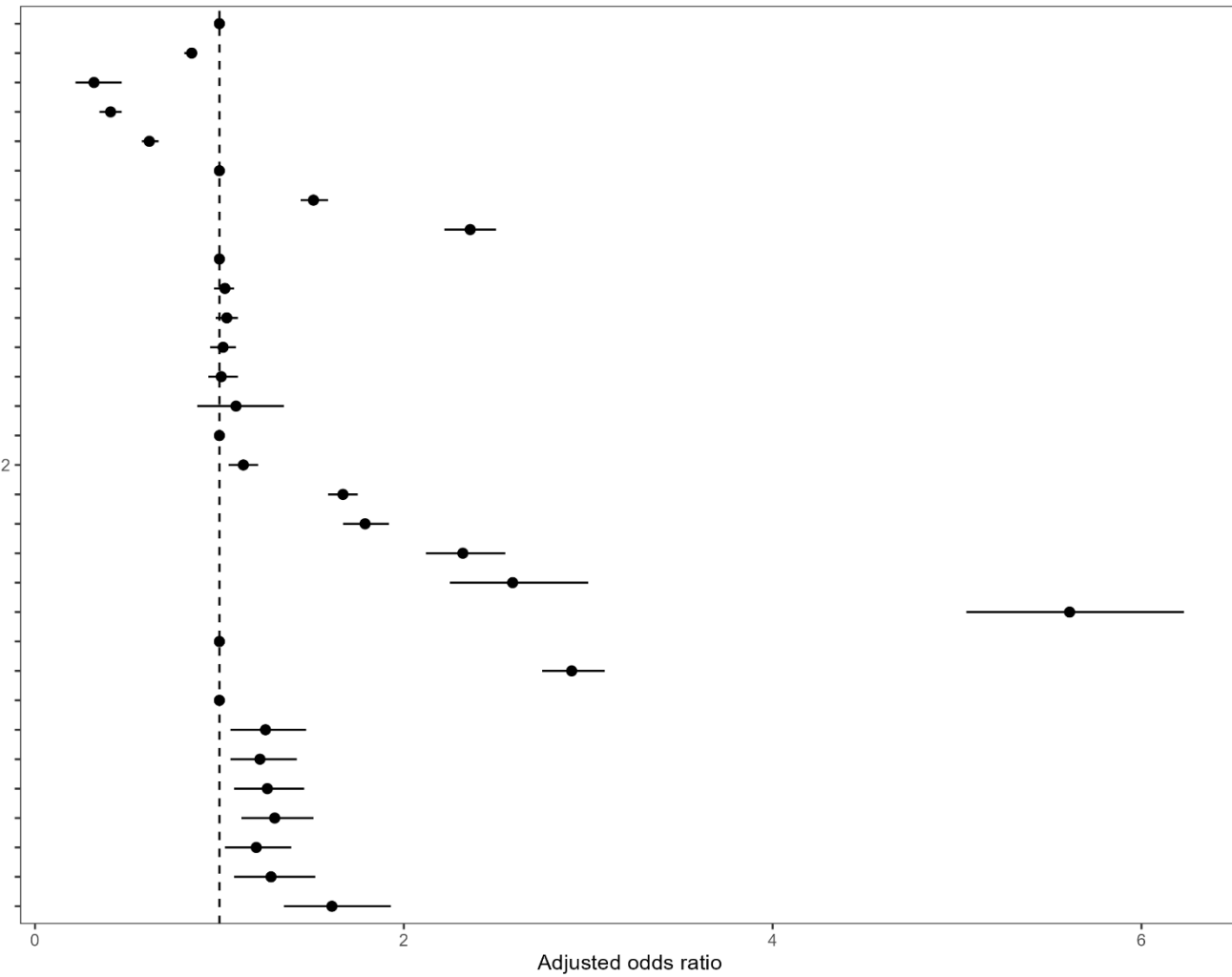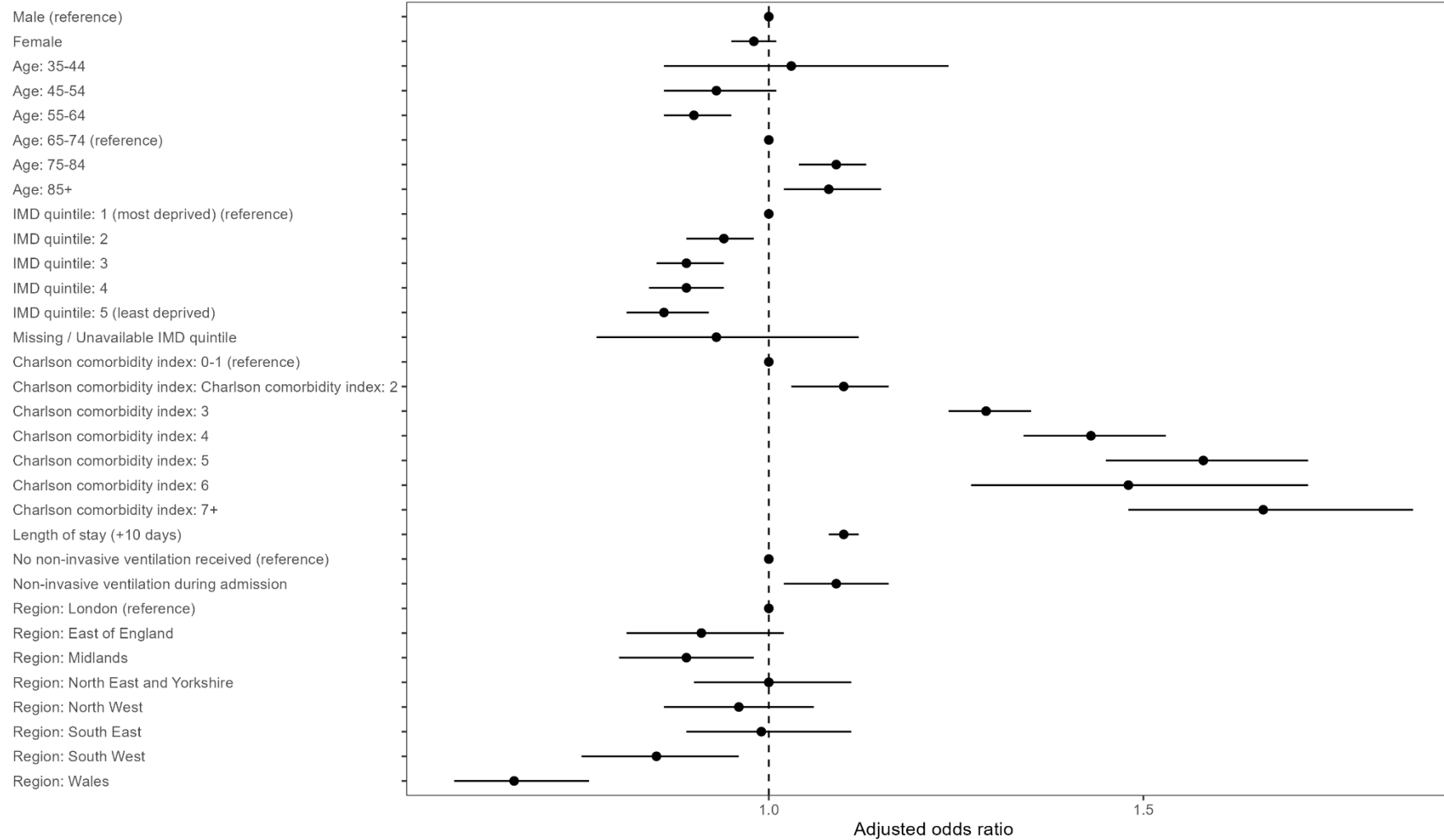
Mortality

COPD: 30-day mortality

COPD: 90-day mortality

Readmission

COPD: 30-day readmission

Male (reference)
Female
Age: 35-44
Age: 45-54
Age: 55-64
Age: 65-74 (reference)
Age: 75-84
Age: 85+
IMD quintile: 1 (most deprived) (reference)
IMD quintile: 2
IMD quintile: 3
IMD quintile: 4
IMD quintile: 5 (least deprived)
Missing / Unavailable IMD quintile
Charlson comorbidity index: 0-1 (reference)
Charlson comorbidity index: Charlson comorbidity index: 2
Charlson comorbidity index: 3
Charlson comorbidity index: 4
Charlson comorbidity index: 5
Charlson comorbidity index: 6
Charlson comorbidity index: 7+
Length of stay (+10 days)
No non-invasive ventilation received (reference)
Non-invasive ventilation during admission
Region: London (reference)
Region: East of England
Region: Midlands
Region: North East and Yorkshire
Region: North West
Region: South East
Region: South West
Region: Wales

Adjusted odds ratio

COPD: 90-day readmission

	Adjusted odds ratio
Male (reference)	
Female	
Age: 35-44	
Age: 45-54	
Age: 55-64	
Age: 65-74 (reference)	
Age: 75-84	
Age: 85+	
IMD quintile: 1 (most deprived) (reference)	
IMD quintile: 2	
IMD quintile: 3	
IMD quintile: 4	
IMD quintile: 5 (least deprived)	
Missing / Unavailable IMD quintile	
Charlson comorbidity index: 0-1 (reference)	
Charlson comorbidity index: Charlson comorbidity index: 2	
Charlson comorbidity index: 3	
Charlson comorbidity index: 4	
Charlson comorbidity index: 5	
Charlson comorbidity index: 6	
Charlson comorbidity index: 7+	
Length of stay (+10 days)	
No non-invasive ventilation received (reference)	
Non-invasive ventilation during admission	
Region: London (reference)	
Region: East of England	
Region: Midlands	
Region: North East and Yorkshire	
Region: North West	
Region: South East	
Region: South West	
Region: Wales	