Determinants of lipid-lowering medication prescribing in a multi-ethnic adult population diagnosed with familial hypercholesterolaemia in South London

Background
Familial hypercholesterolaemia (FH) (prevalence 1 in 250) is an inherited condition that significantly increases risk of premature cardiovascular disease. Early diagnosis can potentially normalise cardiovascular risk with lipid-lowering medicines (statins and fibrates). Only 7% of patients with FH are identified in the UK. Improving identification, and understanding disparities in ascertainment and management, is an NHS priority.

Aim
To assess determinants of lipid-lowering prescribing in ethnically diverse adults with an FH code.

Method
Retrospective cross-sectional analysis of Lambeth DataNet, containing anonymised adult patient data from 41 practices in South London. Stata 17 was used to run sequential multilevel logistic regression models, adjusted for practice effects, to estimate the odds of no lipid-lowering prescription in FH-coded adults; this was assessed across 10 ethnic groups and other patient-level factors: demographic, socioeconomic, lifestyle, comorbidities, and practice factors (consultation frequency and practice list size).

Results
One hundred and sixty-one of 801 (20%) of adults with an FH code received no lipid-lowering medication. The fully adjusted model for no lipid-lowering prescriptions showed the following associations: age (years) odds ratio (OR) 0.93 (P<0.001, 95% confidence interval [CI] = 0.91 to 0.95), male sex OR 0.47 (P = 0.002, 95% CI = 0.29 to 0.76), diabetes OR 0.26 (P = 0.04, 95% CI = 0.70 to 0.96), hypertension OR 0.30 (P<0.01, 95% CI = 0.12 to 0.72), and frequency of GP attendance OR 0.48 (P = 0.03, 95% CI = 0.24 to 0.94). Sensitivity analyses examining determinants of high-intensity statin prescribing found similar results.

Conclusion
The study suggests important determinants of lipid-lowering prescribing in an ethnically diverse adult population included older age, male sex, hypertension, and diabetes. Ethnicity showed no significant associations with lipid-lowering prescribing after adjusting for other determinants including deprivation measures.