

were daily, weekly, monthly, every 3 months or never. Multivariate logistic regression on weighted data was performed to assess variation by sex, age group (50 to state pension age (SPA), SPA to 74, 75 and over), and wealth quintile.

**Results** 5,142 core participants responded to both W9 and CW1. Of these, 553 (10.75%; 95% confidence interval (CI) 9.71 to 11.89) reported never using the internet in W9 and 733 (14.26%; 13.05 to 15.57) in CW1. Of those aged 75 and older, 320 (30.64%; 26.87 to 34.87) were 'never users' in W9 and 419 (40.03%; 35.51 to 45.03) in CW1. Univariate analysis found that the odds of reporting 'never use' were higher for women than men (W9 odds ratio (OR) 1.39; (CI) 1.11 to 1.73, CW1 1.35; 1.11 to 1.66), older age groups (W9 4.21; 3.36 to 5.27, CW1 4.24; 3.50 to 5.14), and less wealthy quintiles (W9 1.18; 1.10 to 1.26, CW1 1.19; 1.11 to 1.27). Multivariate analysis found that age was the most important predictor of never using the internet. The odds for older age groups were 4.73; 3.81 to 5.89 (W9) and 4.93; 4.09 to 5.93 (CW1). The differences between women and men, and between wealth quintiles, were no longer statistically significant.

**Conclusion** The proportion of participants reporting that they never used the internet increased slightly during the pandemic and included 4 in every 10 of those aged 75 and older. A limitation is that W9 data were collected using a paper survey delivered by an interviewer, and CW1 were administered over the phone or internet. Overall, there is a substantial risk that a 'digital first primary care' policy will create barriers for those aged over 75 years. It will be important to maintain alternative access routes to avoid increasing barriers to health care access and subsequent inequalities in the care provided to older people in England.

OP34

#### ETHNIC AND EDUCATIONAL INEQUALITIES IN COVID-19 VACCINE HESITANCY: CROSS-SECTIONAL ANALYSIS OF THE UK HOUSEHOLD LONGITUDINAL STUDY

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**Background** Vaccination is crucial to address the COVID-19 pandemic but inequalities in uptake may exacerbate existing health inequalities. We investigate the UK prevalence of COVID-19 vaccine hesitancy, identify which population sub-groups are more likely to be vaccine hesitant, and report stated reasons for hesitancy.

**Methods** Nationally representative survey data from 12,035 participants were collected from 24th November to 1st December 2020 for wave 6 of the UK Household Longitudinal Study ('Understanding Society') COVID-19 web survey. Participants self-reported ethnicity, highest educational attainment, gender, age, how likely they would be to have a vaccine if offered and their main reason for hesitancy. Weighted cross-sectional analysis assessed the prevalence of vaccine hesitancy and logistic regression models estimated independent associations.

**Results** Overall vaccine hesitancy was low (18% unlikely/very unlikely). Vaccine hesitancy was higher in women (21.0% vs

14.7% in men), in younger age groups (26.5% in 16–24 year olds vs 4.5% in 75+) and in those with lower education levels (18.6% no qualifications vs 13.2% degree qualified). Vaccine hesitancy was high in Black (71.8%) and Pakistani/Bangladeshi (42.3%) ethnic groups. Odds ratios for vaccine hesitancy after adjustment for age and gender were 13.42 (95% CI:6.86, 26.24) in Black, 2.54 (95% CI:1.19, 5.44) in Pakistani/Bangladeshi groups, and 1.76 (95% CI:1.10, 2.82) for Other White (including Eastern European) ethnic groups (compared to White British/Irish). Vaccine hesitancy was not higher in all minority ethnic groups; for example, ORs were 1.11 (95% CI:0.64, 1.95) for Indian ethnicity and 0.67 (95% CI:0.24, 1.87) for Other Asian (including Chinese) ethnicity. Lower education was also related to vaccine hesitancy (no qualifications versus degree OR 3.54; 95% CI:2.06, 6.09) but ethnic differences largely remained when education was included in the model. For those who were vaccine hesitant the most common stated reason for hesitancy was concerns over unknown future effects (42.7%). However, when compared to the White British/Irish group, Black participants were more likely to state they 'Don't trust vaccines' (29.2% vs 5.7%) and the Pakistani/Bangladeshi ethnic group more frequently cited worries about side-effects (35.4% vs 8.6%).

**Conclusion** Vaccine hesitancy is strongly associated with education and ethnicity, with marked ethnic heterogeneity. Black and Pakistani/Bangladeshi participants reported considerably greater vaccine hesitancy than White British/Irish ethnicity, but some minority ethnic groups did not. Educational inequalities did not account for ethnic differences. Vaccine programmes need to understand reasons for vaccine hesitancy within specific population sub-groups and take urgent action to improve uptake.

OP35

#### RACE, ETHNICITY AND COVID-19 VACCINATION: A QUALITATIVE STUDY OF UK HEALTHCARE STAFF

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**Background** COVID-19-related inequities experienced by racial and ethnic minority groups including healthcare professionals mirror wider health inequities, which risk being perpetuated by lower uptake of vaccination. We aim to better understand lower uptake among racial and ethnic minority staff groups to inform initiatives to enhance uptake.

**Methods** Twenty-five semi-structured interviews were conducted (October 2020-January 2021) with UK-based healthcare staff. Data were inductively and thematically analysed.

**Results** Vaccine decision-making processes were underpinned by an overarching theme, 'weighing up risks of harm against potential benefits to self and others'. Sub-themes included 'fear of harm', 'moral/ethical objections', 'potential benefits to self and others', 'information and misinformation', and 'institutional or workplace pressure'. We identified ways in which these were weighted more heavily towards vaccine hesitancy