COVID-19 was associated with large and consistent social gradients in vaccination uptake; (iii) differences in vaccine preventable disease incidence; (iv) differences in the vaccination uptake; (iii) differences in health effects; and (iv) differences in health opportunity costs. The concept was illustrated by a retrospective modelling exercise of 4-component meningococcal serogroup B (4CMenB) infant vaccination against serogroup B invasive meningococcal disease (MenB) in England, for which an existing model was adapted. Five social groups were analysed based on Index of Multiple Deprivation Quintiles (IMDQ). Results: 4CMenB infant vaccination disproportionately prevented MenB cases among more deprived groups: of all prevented cases, 40.3% were among the most deprived IMDQ (accounting for 25.9% of the target population <5 years of age) and 78.1% among the three most deprived IMDQs. Vaccination in a positive, though small, net equity benefit, and the direction of equity impact was robust to sensitivity analyses varying the distribution of uptake, MenB carriage prevalence, and assumptions related to life expectancy and utility stratified by IMDQ. Conclusions: Within a national immunisation programme, 4CMenB vaccination improves health equity by preventing disproportionately more cases in more socially disadvantaged groups. The health equity impacts of vaccination can be captured in health economic evaluation although there is a need to improve the evidence base and develop more user-friendly equity impact measures.