

# Do integrated paediatric asthma interventions in one ICS reach those most in need in the community that they serve?

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## Objectives

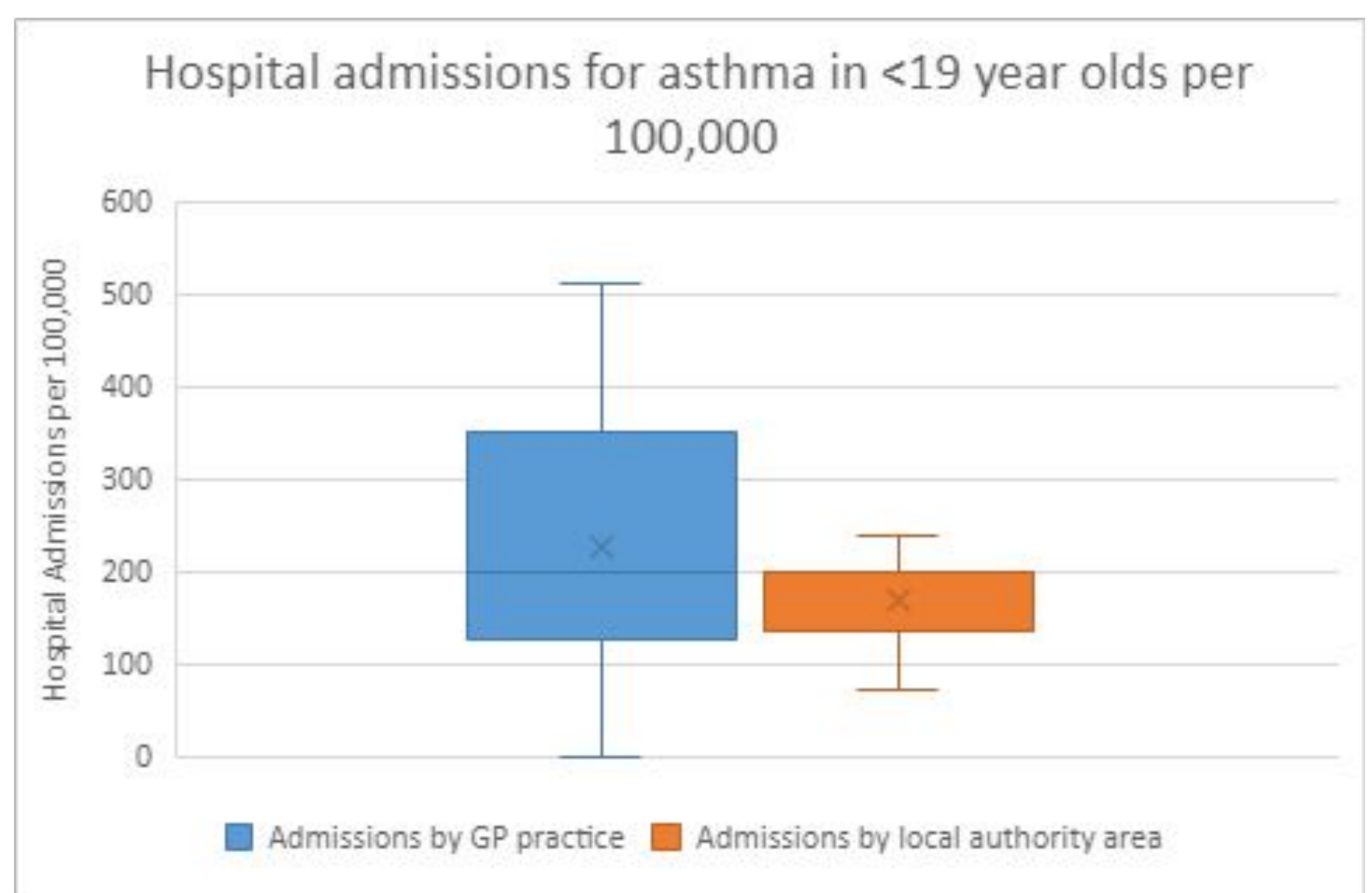
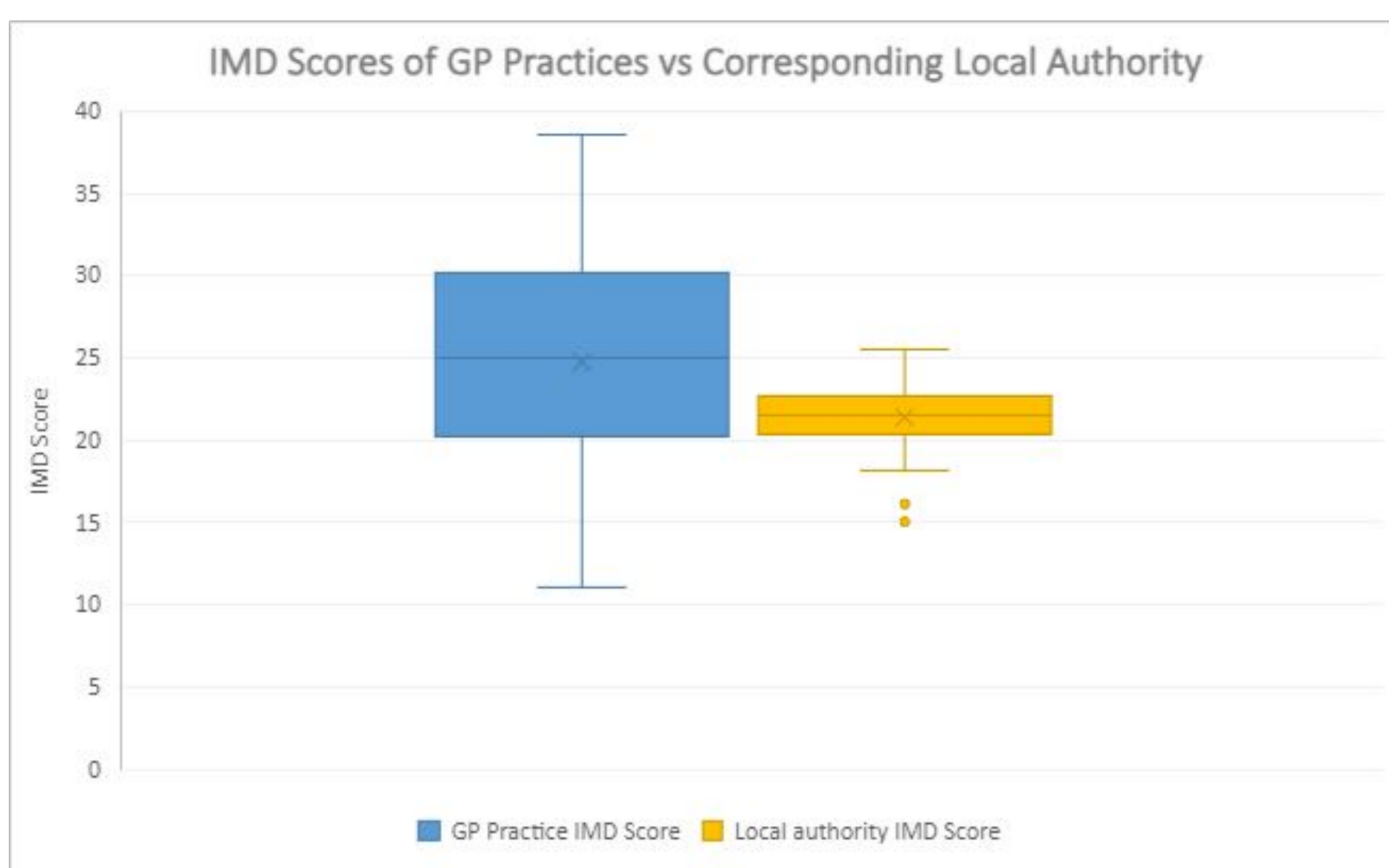
- ❖ Asthma is the most common non-communicable disease in children [1], and the UK has among the highest childhood asthma death rates in Europe [2]
- ❖ Integrated paediatric asthma care in North West London ICS aims to improve care through **MDT case-based discussions** and **group consultations**
- ❖ Aim: to evaluate whether integrated paediatric asthma care is reaching the patients most in need
- ❖ We compared patient demographics at GP practices we intervened at with the demographics for the related local authority
- ❖ Three measures were used as a proxy for need
  - Indices of multiple deprivation (IMD) score
  - Hospital admission rates for asthma in patients <19 years old
  - Proportion of patients <18 years old living in highly polluted areas

## Results

- ❖ Practices intervened at serviced a **significantly more deprived population** than the surrounding area
  - IMD of 24.7 vs 21.4 (p=0.003)
- ❖ Hospital admission was comparable between GP practices and the local authorities
  - 227 versus 168 admissions per 100,000 patients respectively (p=0.118)
  - Data available for 19 out of 40 practices
- ❖ No significant difference between the proportion of patients living in highly polluted areas at intervention GP practices compared with local authority as a whole
  - 1.71% versus 2.76% respectively (p=0.131)
  - Data available for 38 out of 40 practices

## Methods

- ❖ Asthma interventions between November 2021 and July 2023 involving 40 GP practices were analysed
- ❖ Demographic data for the practice and the corresponding local authority were obtained from fingertips.phe and the ICS's linked datasets
- ❖ T-tests in excel were used for statistical analysis



## Conclusions

- ❖ Integrated model of paediatric asthma care **can reach the more deprived patients** in the areas they are targeted.
- ❖ These patients have levels of hospital admissions for asthma and live in areas with air pollution comparable to the average for the overall area.
- ❖ Limitations
  - Although GP practices may serve patients in deprived communities, it is unclear if these patients are the ones benefiting from these interventions
  - Limited sample sizes due to difficulty obtaining data
- ❖ Next steps: further research into the effects of these interventions

## References

1. The Global Burden of Respiratory Disease- Impact on Child Health, H Zar and T Ferkol, 2014
2. International comparisons of health and wellbeing in adolescence and early adulthood, R Shah et al., 2019