

Contextualising the impact of Multiple Sclerosis (MS) in England through HES analysis

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INTRODUCTION

- Multiple sclerosis (MS) affects over 121,314 people in England, representing an increase from previous estimates of 117,420.¹ This increase in identified cases comes at a time of significant advances in MS treatment over the past decade, including new disease-modifying therapies that can effectively slow disease progression. While these therapeutic innovations offer new hope for patients, evidence suggests that healthcare access and outcomes in MS, like many chronic conditions, may be influenced by socioeconomic factors.²
- Previous research has demonstrated that socioeconomic deprivation can impact both timely access to healthcare services and long-term engagement with care pathways.³ This study analysed patient-level data to examine disease patterns and evaluate healthcare interactions across different socioeconomic groups, with particular attention to potential disparities in diagnosis, treatment access, and care engagement.

OBJECTIVES

This study aimed to identify the number of patients living with MS in the UK, investigating disease patterns and understanding interaction with healthcare across patient groups.

METHOD

Using NHS Hospital Episode Statistics (HES), the ICD-10 code of G35X and HRG code of AA30 were used to identify a cohort of patients that have presented to care and/or received treatment for MS. The cohort was refined due to inaccuracies in outpatient data coding to count the unique number of patients that have received treatment in the past 5 years. Assumptions and findings were refined using the expert clinical input of a Consultant Neurologist.

RESULTS

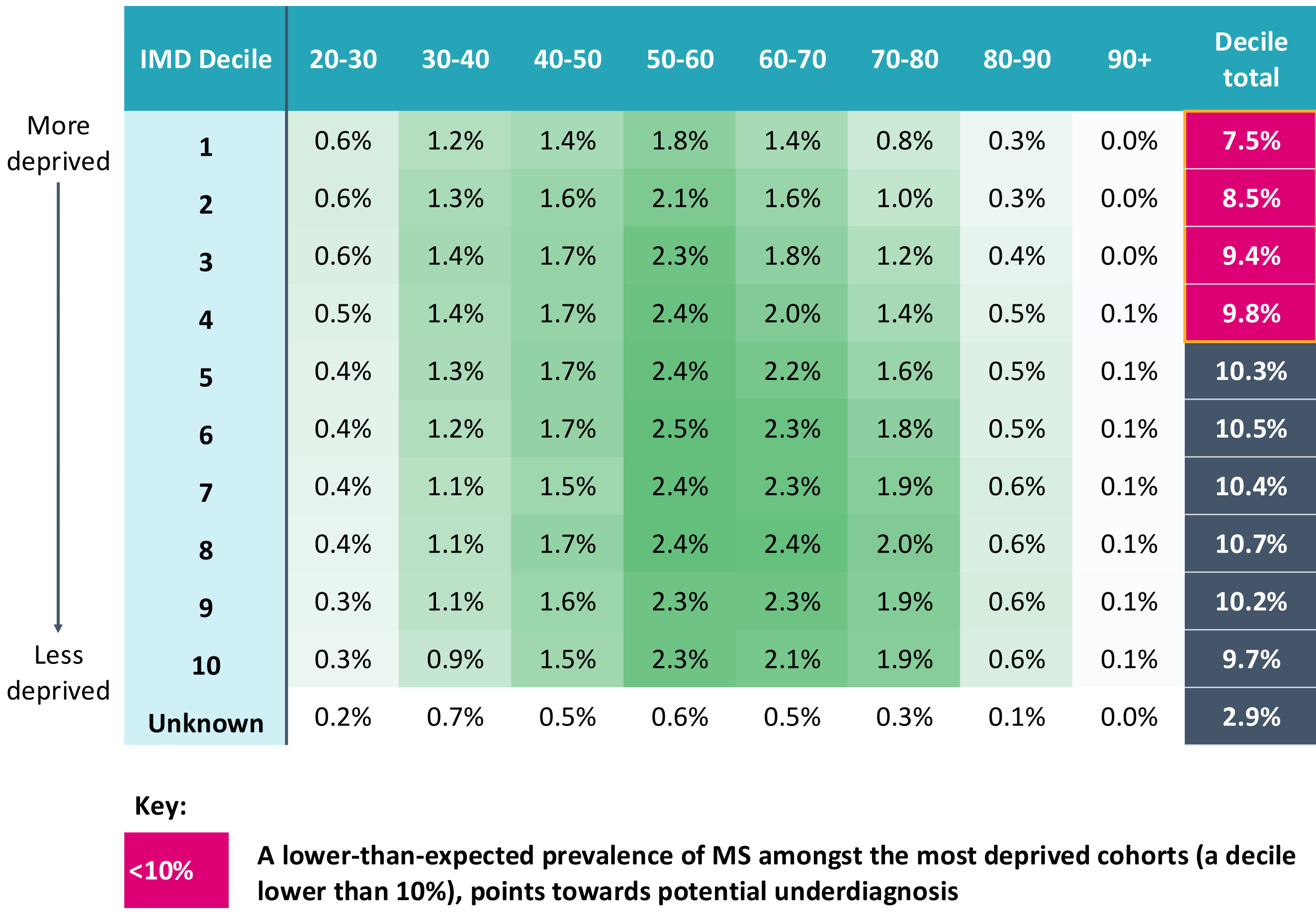
The identified population of people living with MS (PwMS) in the UK was estimated to be 121,314 in 2024, compared to the most recent study reporting a population size of 107,300 in 2022.¹ The findings aligned with clinical hypotheses that 71% of people with MS are female, and non-white female patient groups experience the highest prevalence.

- MS prevalence was markedly lower in the most deprived areas (deciles 1-3), suggesting potential underdiagnosis in these communities.
- When diagnosed, patients from more deprived backgrounds were typically younger (42 years vs 47 years in less deprived areas) and presented with more active disease progression.
- Despite being offered more follow-up appointments, patients from deprived areas showed higher rates of non-attendance at outpatient clinics.
- These patients were also less likely to travel beyond their local area for care to receive high-efficacy treatments.

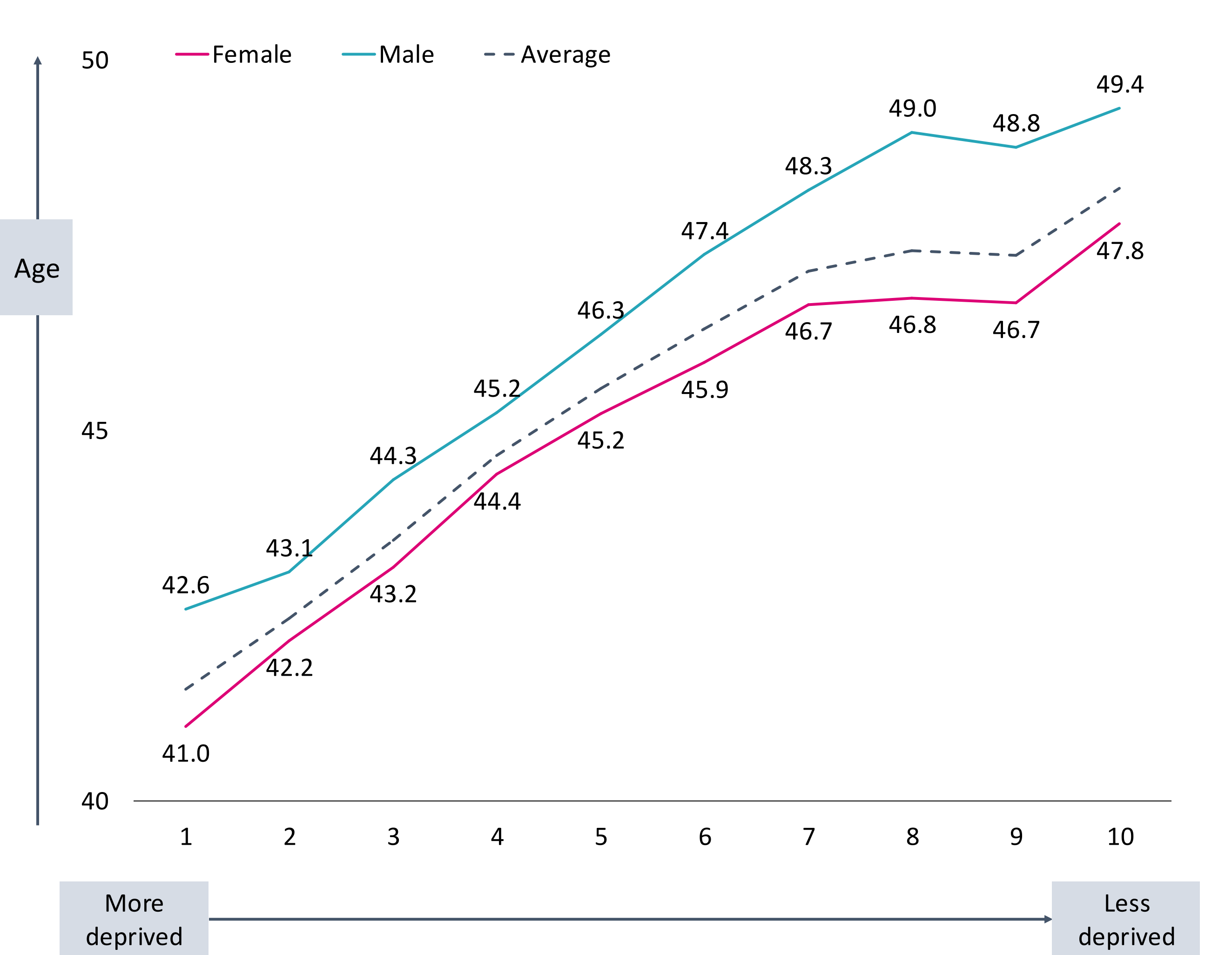
CONCLUSION

This study identified 3% more people living with MS than previously understood and revealed significant systemic inequalities in MS care delivery across socioeconomic groups. The findings highlight a pattern where people from deprived areas face multiple barriers: potential underdiagnosis, earlier disease onset, challenges in accessing optimal care, and reduced engagement with health services. Despite earlier diagnosis ages suggesting more active disease progression in deprived communities, these patients are less likely to receive high-efficacy treatments or access care beyond their local area.

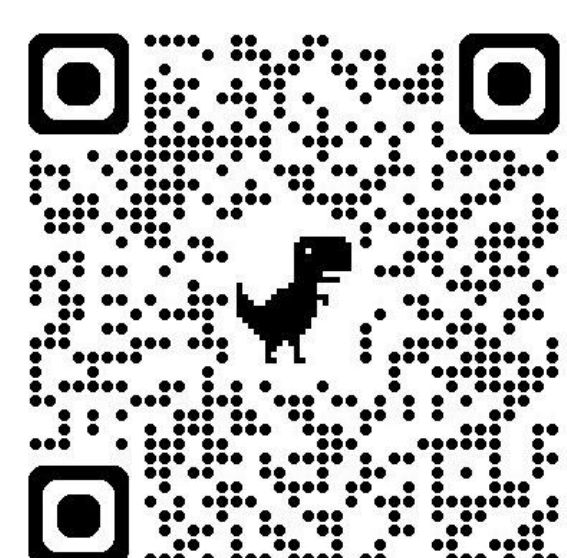
Proportion of PwMS by IMD decile and age bracket
Apr-18 to Dec-23 excluding the pandemic period (Apr-20 to Mar-21), Cohort % of patients with an MS presentation



Average age of patients first diagnosis with MS by IMD decile and gender
Apr-18 to Dec-23, Average age (years)



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