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Investigating data challenges and service use patterns in mental health care for children and young people in England

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Objectives

This study examines challenges in using Mental Health Service Data for research, evaluating data completeness and consistency across key sociodemographic variables. It explores the impact on research reliability, analyses spatial and temporal patterns of service use among children and young people (CYP), and investigates service use by demographics over time.

Methods

We analysed mental health service use among CYP across English local authorities (2016–2023), focusing on data completeness and inconsistencies. We examined records of CYP in contact with mental health services, those who attended care contacts, and those who did not engage after referral. To assess the impact of data quality on research reliability, we modelled appointment attendance likelihood as a function of sociodemographic variables. Additionally, we analysed spatial and temporal trends, stratified by age, gender, ethnicity, and socioeconomic status, to understand variations in service use across regions and over time.

Results

Between 2016 and 2023, over 4.7 million CYP in England had contact with mental health services, with 62.4% attending at least one care contact. Data completeness varied in time with the increasing health provider submissions, while missing ethnicity, geography, and socioeconomic status persisted, often clustering in subgroups with distinct attendance patterns.

Spatial analysis revealed regional variations, with the North East, South East, and South West showing the highest service contact rates, while attendance was highest in Northern England and parts of the Midlands. Contact with mental health services increased from 371,656 CYP in 2016 to 1,699,899 in 2023, though attendance stabilized at 59.8%. Monthly submissions surged towards the end of financial year, highlighting

administrative influences. Sociodemographic trends revealed evolving patterns over time.

Conclusion

The Mental Health Service Data offers valuable national-level information on CYP using services in England. Our analysis identified data inconsistencies, missingness, and reporting issues. While this data is a useful tool, improved collection practices and methods to address missingness are essential for more reliable insights to inform research and policy.



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