Social and ethnic group differences in healthcare use by children aged 0–14 years: a population-based cohort study in England from 2007 to 2017

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ABSTRACT

Objective To describe social and ethnic group differences in children's use of healthcare services in England, from 2007 to 2017.

Design Population-based retrospective cohort study.

Setting/Patients We performed individual-level linkage of electronic health records from general practices and hospitals in England by creating an open cohort linking data from the Clinical Practice Research Datalink and Hospital Episode Statistics. 1 484 455 children aged 0–14 years were assigned to five composite ethnic groups and five ordered groups based on postcode mapped to index of multiple deprivation.

Main outcome measures Age-standardised annual general practitioner (GP) consultation, outpatient attendance, emergency department (ED) visit and emergency and elective hospital admission rates per 1000 child-years.

Results In 2016/2017, children from the most deprived group had fewer GP consultations (1765 vs 1854 per 1000 child-years) and outpatient attendances than children in the least deprived group (705 vs 741 per 1000 child-years). At the end of the study period, children from the most deprived group had more ED visits (447 vs 314 per 1000 child-years) and emergency admissions (100 vs 76 per 1000 child-years) than children from the least deprived group.

In 2016/2017, children from black and Asian ethnic groups had more GP consultations than children from white ethnic groups (1961 and 2397 vs 1824 per 1000 child-years, respectively). However, outpatient attendances were lower in children from black ethnic groups than in children from white ethnic groups (732 vs 809 per 1000 child-years). By 2016/2017, there were no differences in outpatient, ED and in-patient activity between children from white and Asian ethnic groups.

Conclusions Between 2007 and 2017, children living in more deprived areas of England made greater use of emergency services and received less scheduled care than children from affluent neighbourhoods. Children from Asian and black ethnic groups continued to consult GPs more frequently than children from white ethnic groups, though black children had significantly lower outpatient attendance rates than white children across the study period. Our findings suggest substantial levels of unmet need among children living in socioeconomically disadvantaged areas. Further work is needed to determine if healthcare utilisation among children from Asian and black ethnic groups is proportionate to need.

What is already known on this topic?

► Between 2007 and 2017, overall rates of general practitioner (GP) consultation fell across England, while unscheduled care use and outpatient attendances increased substantially.
► These results may mask differences in healthcare use between children from different socioeconomic and ethnic backgrounds.
► There is some evidence of variation in child health outcomes, with worsening infant mortality seen in more deprived areas and certain ethnic groups.

What this study adds?

► This study demonstrates divergent patterns of healthcare use along a social gradient among children living in England.
► While the use of GP and unscheduled care services remains relatively high in Asian children, children from black ethnic groups are less likely to access specialist outpatient care despite rising health needs.
► These results suggest substantial levels of unmet need among children living in more deprived areas.

INTRODUCTION

Child health inequalities are widening in the UK.[1 2] Social gradients exist across various child health conditions, including dental caries,[3] asthma attacks[4] and mental illness.[5] In England, rates of childhood obesity and infant mortality are higher in children from black African Caribbean groups than among their peers.[2] Universal health coverage can mitigate health inequalities and improve population health by reducing the mismatch between clinical need and healthcare use.[6] The UK National Health Service (NHS) provides healthcare free at the point of delivery, and international comparisons suggest it has historically been one of the world's most equitable health systems.[7] A large cross-sectional study conducted in 2002 suggested that self-reported health status, rather than parental socioeconomic status or ethnicity, was the best predictor of healthcare use among British children and young people (CYP).[8] However, there remains a professional,

legal and moral duty to ensure equity of access to services for CYP across income and ethnic groups, particularly in view of recent evidence on rising child poverty levels,[9] and a disproportionate increase in the incidence of adverse child health outcomes among CYP from disadvantaged backgrounds.[10 11] These associations may be mediated by reduced access to or use of health services, emphasising the need to reassess social and ethnic group differences in healthcare use.

When analysing patterns of healthcare use, it is important to consider activity in all settings (online supplemental figure 1). The cradle-to-grave NHS model is centred on general practitioners (GPs), family physicians who provide first contact care to acutely unwell patients, support chronic disease management and act as gatekeepers for onward referral to specialist services.[12] GPs also provide preventive care including childhood vaccinations and development checks. We have previously described changes in children's healthcare use in England between 2007 and 2017.[13] We reported increasing emergency department (ED) and outpatient activity, and decreasing GP consultation rates and in-patient activity among children aged 0–14 years. However, these overall trends may mask differences between CYP from different social and ethnic groups.

In this population-based, retrospective cohort study, we sought to describe differences in healthcare use among children aged 0–14 years and living in England, by healthcare setting, level of deprivation and ethnic group. We hypothesised that children from disadvantaged groups would use less planned and preventive primary and hospital care, resulting in more chaotic disease control, higher rates of acute illness and greater use of emergency services. Our secondary objective was to determine whether between-group differences in healthcare use within our study cohort changed between 2007 and 2017.

METHODS

Study design, data sources and population

We conducted a population-based retrospective cohort study using prospectively collected, longitudinal, patient-level data from the Clinical Practice Research Datalink (CPRD). This includes deidentified data on patient demographics, primary care consultations and secondary care referrals. CPRD is the largest validated primary care research database in the UK, representative for age, sex and ethnicity and encompassing 8% of the UK population.[14]

We linked CPRD to Hospital Episode Statistics (HES), which contains information on NHS hospital activity in England.

Our open cohort included all CYP aged 0–14 years in HES-linked CPRD registered 'up to standard' general practices in England between 1 April 2007 and 31 July 2017. Each child contributed to the time of observation from birth or the date at which they registered at a participating general practice. Children remained in the cohort until they transferred out of practice, reached the age of 15 years, died or reached the end of the study period.

We assigned children to five composite, non-homogenous groups based on ethnic ancestry coding within the CPRD dataset (box 1).

These categories are recommended for use by the UK Office for National Statistics (ONS).[15] Completeness of ethnicity coding within our dataset increased from 74.5% in 2007/8% to 87.8% in 2016/2017. Each participant's postcode was used to allocate them to five ordered groups (most to least deprived) based on the Index of Multiple Deprivation. Index of Multiple Deprivation (IMD) is an official measure of relative deprivation which describes the proportion of children aged 0–15 years living in income-deprived neighbourhoods.[16]

Box 1 Ethnic group composition

White
- ► English, Welsh, Scottish or Northern Irish.
- ► Irish.
- ► Gypsy or Irish traveller.
- ► Any other White background.

Black
- ► Black African.
- ► Black Caribbean.
- ► Any other Black background.

Asian
- ► Indian.
- ► Pakistani.
- ► Bangladeshi.
- ► Chinese.
- ► Any other Asian background.

Mixed
- ► White and Black Caribbean.
- ► White and Black African.
- ► White and Asian.
- ► Other mixed/multiple ethnic background.

Other
- ► Arab.
- ► Any other ethnic group.

Outcomes

Our main outcomes were GP consultations, outpatient attendances, ED visits and emergency and elective in-patient admissions. Practical details of how we used CPRD-HES linked data to derive these outcomes are described in online supplemental file 1.[13] We defined a GP consultation as any face-to-face consultation for illness that took place on practice premises. We excluded routine preventive primary care visits, such as childhood immunisations and child development checks. We defined an outpatient attendance as a recorded consultation between a child and the intended specialist healthcare professional on the date of the appointment on the HES outpatient appointment dataset. We defined an ED visit as an attendance at a consultant-led ED capable of receiving acutely unwell patients, with a 24-hour services and full resuscitation facilities. We excluded visits to consultant-led single-specialty EDs such as walk-in rapid access eye casualty services. We defined an emergency admission as an unplanned admission to hospital based on acute clinical need and an elective admission as a hospital admission where the decision to admit could be separated in time from the admission itself.

Analysis

We calculated annual rates per 1000 child-years for each outcome by dividing the total number of events by the total child-years of observation, directly standardised by age (see online supplemental appendix 1 for more information). We calculated percentage change from baseline for each outcome in each social and ethnic group. We calculated ratios of activity at baseline and in 2016/2017 by dividing the utilisation rate in the most deprived group by that in the least deprived group and dividing the rate for each ethnic group by that among children from white ethnic groups. We used Fieller's theorem to calculate the CIs for the ratios of two means.[17] Due to changes in recording of ED data within the HES dataset, data are not comparable before and after 2010/2011. We used 2011/2012 as

Table 1 Changes in rates of activity by social and ethnic group and healthcare setting

Outcome of interest	IMD group	Baseline rate/1000 child-years	2016/2017 rate/1000 child-years	Percentage change from baseline (95% CI)	Ethnic group	Baseline rate/1000 child-years	2016/2017 rate/1000 Child-years	Percentage change from baseline (95% CI)
GP consultations	1 (least deprived)	2021	1854	−8.3 (−4.1 to −12.4)	White	2113	1824	−13.7 (−11.1 to −16.3)
	2	1987	1817	−8.6 (−4.2 to −12.9)	Black	2404	1961	−18.4 (−7.4 to −29.4)
	3	1999	1826	−8.7 (−4.2 to −13.1)	Asian	2989	2397	−19.8 (−8.9 to −30.7)
	4	2001	1889	−5.6 (−1.3 to −9.9)	Mixed	2343	1951	−16.7 (−3.6 to −29.8)
	5 (most deprived)	1978	1765	−10.8 (−6.7 to −14.8)	Other	1752	1663	−5.1 (2.2 to −12.3)
Outpatient attendances	1 (least deprived)	486	741	52.5 (49.4 to 55.6)	White	641	809	26.2 (23.9 to 28.5)
	2	503	754	49.9 (46.5 to 53.3)	Black	598	732	22.4 (12.7 to 32.1)
	3	499	735	47.3 (43.9 to 50.7)	Asian	720	800	11.1 (2.7 to 19.6)
	4	528	734	39.0 (35.6 to 42.4)	Mixed	688	737	7.1 (−3.6 to 17.8)
	5 (most deprived)	546	705	29.1 (25.8 to 32.4)	Other	325	465	43.1% (40.3 to 45.9)
ED visits	1 (least deprived)	265	314	18.5 (16.2 to 20.7)	White	357	402	12.6 (11.1 to 14.1)
	2	288	340	18.1 (15.5 to 20.6)	Black	405	370	−8.6% (−2.0 to −15.3)
	3	313	373	19.2 (16.5 to 21.8)	Asian	378	390	3.2 (−2.3 to 8.7)
	4	348	408	17.2 (14.5 to 19.9)	Mixed	383	374	−2.4 (−9.8 to 5.1)
	5 (most deprived)	390	447	14.6 (11.9 to 17.4)	Other	191	259	35.6 (31.7 to 39.5)
Emergency admissions	1 (least deprived)	67	76	13.4 (12.1 to 14.8)	White	97	95	−2.1 (−1.1 to −3.1)
	2	70	79	12.9 (11.3 to 14.4)	Black	88	95	8.0 (3.6 to 12.3)
	3	70	89	27.1 (25.5 to 28.8)	Asian	106	106	0.0 (−3.85 to 3.85)
	4	81	96	18.5 (16.9 to 20.2)	Mixed	104	89	−14.4 (−9.5 to −19.4)
	5 (most deprived)	93	100	7.5 (5.9 to 9.2)	Other	39	64	64.1 (61.4 to 66.9)
Elective admissions	1 (least deprived)	42	44	4.8 (3.6 to 5.9)	White	65	55	−15.4 (−14.55 to −16.2)
	2	44	54	22.7 (21.4 to 24.0)	Black	65	62	−4.6 (−0.9 to −8.3)
	3	43	47	9.3 (8.0 to 10.6)	Asian	89	60	−32.6 (−29.4 to −35.7)
	4	49	52	6.1 (4.8 to 7.4)	Mixed	77	85	10.4 (6.3 to 14.5)
	5 (most deprived)	57	57	0.0 (−1.3 to 1.3)	Other	29	36	24.1 (22.0 to 26.3)

Due to improvements in the completeness of ethnicity data during the study period, activity changes by ethnic group should be interpreted with caution.
Baseline year for GP consultations, outpatient attendances, emergency admission and elective admissions—2007/2008.
Baseline year for ED visits—2011/2012.
ED, emergency department; GP, general practitioner.

the baseline year for our analysis of trends in ED activity and 2007/2008 as the baseline year for all other outcomes.

PPI statement

No patients or members of the public were involved in collecting or analysing data for this study, or in the writing or editing of this article.

RESULTS

Overall, 1 484 455 children from 408 GP practices contributed to this cohort study. From 1 April 2007 to 31 March 2017, there were 7 604 024 GP consultations, 981 684 ED visits, 287 719 emergency in-patient hospital admissions, 194 034 elective in-patient hospital admissions and 2 253 533 outpatient visits among children aged 0–14 years in our study population.

Table 1 presents changes in activity in each healthcare setting for children belonging to different social and ethnic groups. Absolute numbers are given for baseline year and 2016/2017 and percentage change from baseline shown for each group. Figure 1 presents trends in children's healthcare use between 2007 and 2017 by setting and social and ethnic group. Table 2 presents ratios of activity in different

social and ethnic groups across the study period. Online supplemental tables 1 and 2 show the raw data used to create the graphs in figure 1, for our analyses by IMD and ethnicity, respectively.

Deprivation

In 2016/2017, the most deprived CYP accounted for fewer GP consultations (1765 vs 1854 per 1000 child-years) and outpatient attendances (705 vs 741 per 1000) than the least deprived. In 2007/2008, the most deprived CYP had 2.1% (95% CI 1.7% to 2.6%) fewer consultations than the least deprived. By 2016/2017, this had widened to 4.8% (4.0% to 5.6%). The social gradient for outpatient attendances reversed across the study period. The most deprived CYP had 12.4% (10.9% to 13.8%) more attendances than the least deprived in 2007/2008, but 4.9% (3.3, 6.4%) fewer in 2016/17.

In contrast, the most deprived CYP had more ED visits (447 vs 314 per 1000), emergency admissions (100 vs 76 per 1000) and elective admissions (57 vs 44 per 1000) than the least deprived in 2016/2017. Ratios of activity in these settings were similar at baseline and in 2016/2017.

Health Utilization Rates for Children under 15 years old by Index of Multiple Deprivation quintile and Healthcare Setting, England 2007–2017
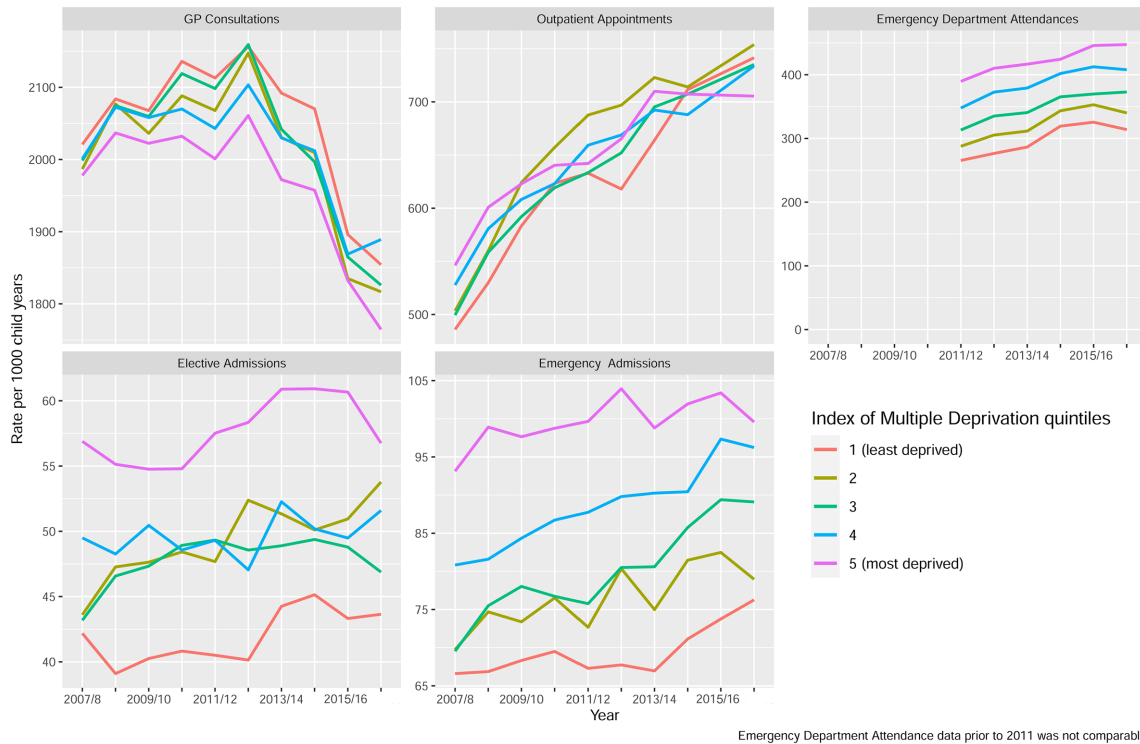
Health Utilization Rates for Children under 15 years old by Ethnic Group and Healthcare Setting, England 2007–2017
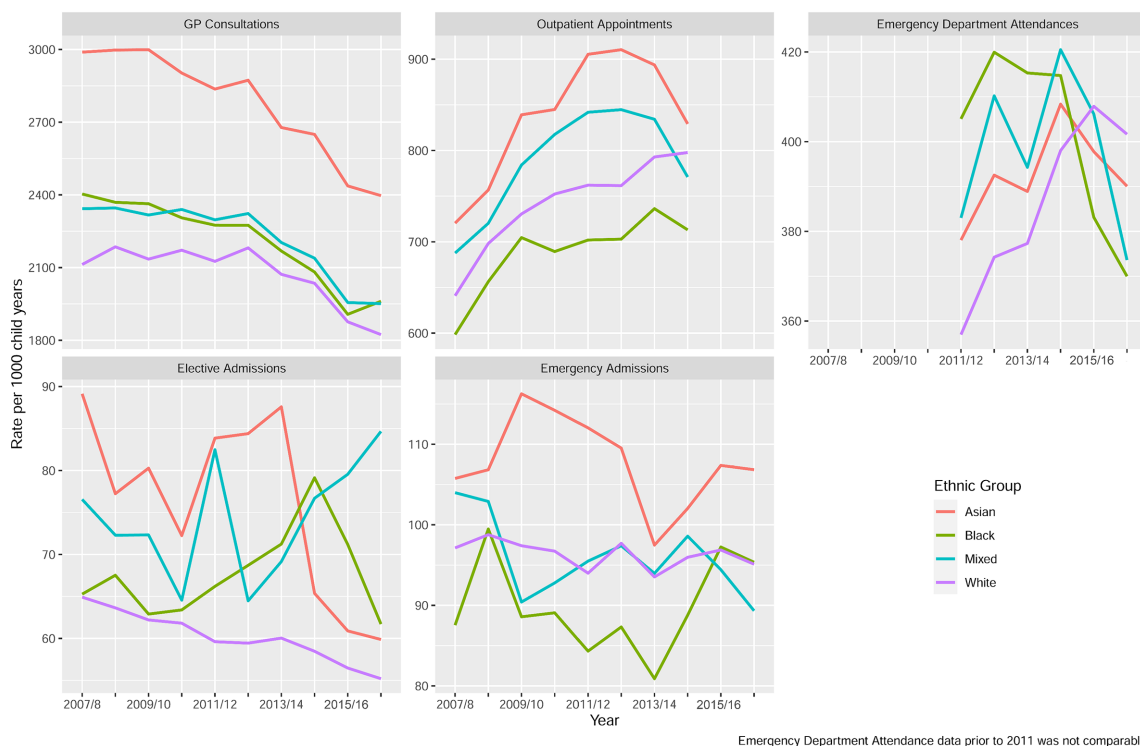

Figure 1 Social and ethnic differences in children's healthcare use graphs. GP, general practitioner.

Ethnicity

In 2016/2017, compared with children from white ethnic groups, black children accounted for more GP consultations (1961 vs 1824 per 1000) and elective admissions (62 vs 55 per 1000). Emergency admission rates were the same in both groups (95 per 1000), but black children had fewer outpatient attendances (732 vs 809 per 1000) and ED visits (370 vs 402 per 1000). Compared with children from white ethnic groups, the ratio of ED activity in those from black ethnic groups reversed from 13.5% (10.6, 16.3) higher to 8% (4.0, 11.9) lower between

Table 2 Ratio of mean utilisation rates by healthcare setting and social and ethnic group

Outcome of interest		Baseline	2016/17
Ratio of mean utilisation rates in children belonging to the most vs least deprived groups			
		Ratio (Lower and Upper 95% CI)	Ratio (Lower and Upper 95% CI)
GP consultations		97.9% (97.4 to 98.3)	95.2% (94.4 to 96.0)
Outpatient attendances		112.4% (110.9 to 113.8)	95.1% (93.6 to 96.7)
ED visits		146.8% (145.1 to 149.3)	142.5% (138.7 to 146.2)
Emergency admissions		139.9% (133.6 to 144.2)	130.6% (123.1 to 140.7)
Elective admissions		134.9% (127.7 to 144.4)	130.1% (119.7 to 140.2)
Ratio of mean utilisation rates in children from black, Asian and mixed ethnic groups vs children from white ethnic groups			
GP consultations	Black	113.8% (112.8 to 114.7)	107.5% (106.2 to 108.8)
	Asian	141.5% (140.5 to 142.4)	131.4% (130.1 to 132.8)
	Mixed	110.9% (109.7 to 112.1)	107.0% (105.5 to 108.5)
Outpatient attendances	Black	93.3% (90.9 to 95.7)	90.5% (87.6 to 93.3)
	Asian	112.3% (110.2 to 114.4)	98.9% (96.3 to 101.4)
	Mixed	107.3 (104.4 to 110.2)	91.1% (88.2 to 94.0)
ED visits	Black	113.5% (110.6 to 116.3)	92.0% (88.1 to 96.0)
	Asian	105.9% (103.6 to 108.2)	97.0% (93.6 to 100.4)
	Mixed	107.3% (104.0 to 110.6)	93.0% (88.8 to 97.3)
Emergency admissions	Black	90.7% (82.5 to 99.0)	100.0% (90.0 to 110.1)
	Asian	109.2% (102.0 to 116.0)	112.4% (102.3 to 121.1)
	Mixed	107.2% (98.0 to 117.0)	93.7% (82.8 to 104.7)
Elective admissions	Black	100.0% (87.8 to 112.3)	112.7% (100.3 to 125.4)
	Asian	136.9% (126.3 to 147.7)	109.1% (98.4 to 120.0(
	Mixed	118.5% (104.2 to 132.9)	154.6% (141.3 to 168.2)

Baseline year for GP consultations, outpatient attendances, emergency admission and elective admissions—2007/2008.
Baseline year for ED visits—2011/2012.
ED, emergency department; GP, general practitioner.

2011/2012 and 2016/2017. In 2007/2008, outpatient activity was 6.7% lower in children from black ethnic groups than in children from white ethnic groups. We observed a similar difference of 9.5% (6.7, 12.4) in 2016/2017.

In 2007/2008, GP consultation rates were 2989 per 1000 in children from Asian ethnic groups and 2113 per 1000 in children from white ethnic groups. Consultation rates fell in both groups across the study period, but remained over 30% higher in children from Asian groups than in white CYP (2397 vs 1824 per 1000) in 2016/2017. At baseline, children from Asian groups had higher ED, outpatient and in-patient activity than white children. These differences were not seen in 2016/2017.

DISCUSSION

In this large population-based retrospective cohort study, we report marked social and ethnic group differences in children's healthcare use in England. During a decade in which child health inequalities widened, use of scheduled and unscheduled care diverged between children living in affluent and deprived postcodes. While outpatient attendance rates were relatively low among children from black ethnic groups across the study period, GP consultation rates remained significantly higher in black and Asian children than among their white peers. By 2016/2017, we found broadly similar overall rates of ED and in-patient activity. Our data suggest that children from black and Asian groups have greater access to primary care services than white children living in England. However, the high rates of adverse child health outcomes in racially minoritised groups indicate that further work is needed to determine whether health service utilisation is proportionate to need.

As described elsewhere,[13] GP consultation rates for all groups significantly outnumbered other forms of healthcare utilisation across the study period. Our study suggests that children living in more affluent areas of England receive more scheduled care in GP practices and specialist clinics, while those from deprived neighbourhoods are more likely to receive unscheduled care. ED visits and hospital admissions are sometimes necessary and appropriate. However, they may result from restricted access to primary care or a failure of successful management in other settings. Previous work has shown that children with greater access to GP appointments in and out-of-hours have significantly lower ED visit rates.[18] The geographical accessibility of English GP practices is similar in affluent and deprived areas.[19] This suggests factors other than proximity also contribute to relatively low use of GP services among CYP from deprived neighbourhoods. GPs in the most deprived areas of England have 15% larger case-loads than GPs working in the most affluent areas.[20] Low parental health literacy is associated with suboptimal preventive care behaviours and inappropriate ED attendances,[21 22] and children living in more deprived areas of England are less likely to engage with preventive care and more likely to require unplanned hospital admission.[23] Few studies have linked parental socioeconomic status, health literacy and child health outcomes, but low health literacy clusters in deprived groups.[24] Work with deprived communities has also highlighted practical barriers to accessing scheduled care. These include difficulties in obtaining appointments in-hours, securing time off work and unacceptable travel costs.[25] With GPs acting as gatekeepers to specialist services, restricted access to primary care may also hinder access to specialist advice. It is concerning that recent studies have highlighted reduced access to tertiary services among children living in deprived areas of England.[26 27]

Proportionate universalism is required to ensure equitable health outcomes for children belonging to different ethnic

groups. Individuals and populations with relatively high health needs require increased access to health services. In 2007/2008, this greater need was reflected in higher GP activity for all ethnic groups and higher outpatient activity in children from Asian and mixed ethnic groups. Previous studies have highlighted similar, high levels of primary care activity among children and adults from Asian ethnic groups living in England.[8 28] While GP activity in all ethnic groups reverted towards levels seen in white groups, it remained relatively high among Asian children. However, it is concerning to see relatively low outpatient activity in children from black ethnic groups. As in adults, much remains to be done to ensure the needs of children belonging to racially minoritised groups are met.[29]

Strengths and limitations

The strengths of this study include its large size, national coverage and representative study population, which reduce the likelihood that our results were due to chance. To our knowledge, this is the largest nationally representative population-based study to assess social and ethnic group trends in children's healthcare use in England across all settings. However, as a sample of the population, our data show wider year-on-year variation for inpatient admissions than previous analysis of national inpatient data.[30] Our analysis did not include data from NHS walk-in centres. NHS 111 services or Child and Adolescent Mental Health services. The composition and volume of missing data in our ethnicity analysis changed over the study period (online supplemental appendix 1). While our 2016/2017 population profile broadly matched 2011 UK census data,[31] trends within each ethnic group should be interpreted with caution due to relatively low representation of racially minoritised groups in our 2007/2008 population. Nonetheless, differing trends in healthcare use across different settings suggest that changes in ethnicity coding completeness alone cannot explain our findings. We used five composite non-homogenous ethnic groups in our analysis, as recommended by the UK ONS to increase consistency and comparability of data. However, we recognise that this is a crude approach which overlooks the complex, self-defined nature of ethnicity and may mask significant within-group differences in socioeconomic and health status, such as those between children from Bangladeshi and Chinese ethnic groups living in the UK. As in other studies using CPRD data,[32] we observed attrition in study population sizes as GP practices transitioned to new electronic patient records. Nonetheless, previous studies have shown very little evidence of systematic bias in the composition of the CPRD population over time.[33] Around 30% of black British children live in economically deprived circumstances, compared with 17% of white British children.[34] As we have not adjusted for deprivation, our findings may underestimate or overestimate the association between ethnicity and children's healthcare use. Finally, IMD provides information on deprivation at neighbourhood level, which may mask household-level variation in parental socioeconomic status in diverse postcodes.

Implications

This study highlights marked social and ethnic inequalities in children's healthcare use in England. Our findings raise concern that the most vulnerable children may be less likely to receive the prevention, health promotion and specialist support which may be most protective against future health problems. Previous work has identified differences in the ability of different health systems to meet children's health needs in an equitable way. For example, one study found that healthcare activity in the Netherlands was well-matched to need, whereas children living in low-income households in the USA experienced a double burden of worse health and less contact with services.[35] It is concerning that patterns of children's healthcare use in England appear closer to those seen in the USA, despite the NHS offering healthcare free at the point of delivery. While context and effective interventions will vary across areas and communities, a combination of the approaches outlined in box 2 could help to deliver more equitable services in England.

CONCLUSION

This study identifies divergent patterns of healthcare use along a social gradient among children aged 0–14 years in England. Children living in more deprived areas have higher ED and in-patient activity, while affluent groups have higher rates of GP and outpatient consultation. Across the study period, outpatient

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Box 2   Policy and practice interventions to reduce social and ethnic inequalities in children's healthcare

Education and training for patients, families and professionals
There is evidence that some health professionals lack confidence and experience in supporting patients from minoritised groups.[36] Training in cultural competence has been well received by child health professionals and could help to address this skills gap.[37 38] A universal teaching programme which provides school-age children and new parents with information on their rights and responsibilities, available services and entitlements could also improve health literacy and support self-care.

Integrated community child health and health literacy
Community health interventions have been found to reduce inequity in health outcomes in low-income and middle-income settings.[39] Evidence-based decision support tools and in-person navigation interventions can encourage appropriate child healthcare utilisation.[40] GP consultations significantly outnumber other forms of clinical consultation between children and healthcare professionals. Integration of care around GP services therefore constitutes a logical means of addressing inequalities in healthcare utilisation. Integrated services have the potential to mitigate and prevent health inequalities, through timely recognition and management of new health problems, coordination and continuity of care and health promotion interventions.[41] Future research on Integrated Care Systems within the English NHS must assess their impact on health inequalities in children and young people.

Community engagement in health service development, staffing and research
Sustainable engagement of disadvantaged and racially minoritised communities in health service development and improvement is essential if we are to address inequalities in the long term.[42] Engaging community groups that are representative of diverse local populations helps to create user-friendly services and address the underlying reasons for poor health.[43] Similarly, involving members of racially minoritised and disadvantaged social groups in a participatory research process is likely to help us better understand the reasons for specific differences in healthcare use between ethnic groups.[44] Efforts to increase representation of health professionals from racially minoritised groups may increase the availability of culturally congruent care,[45] which has been linked to striking improvements in infant mortality among children from black groups in the USA.[46]

activity was lower in children from black ethnic groups than in those from White and Asian groups. GP consultations remained higher in children from black and Asian groups than in white children, and by 2016/2017, outpatient, ED and in-patient activity were similar in children from white and Asian groups. While these data indicate that children from different ethnic groups have relatively equal access to health services in England, the disproportionately high rates of adverse child health outcomes in racially minoritised groups suggest an urgent need for further work to determine whether health service utilisation is proportionate to need. Considered alongside rising child poverty and widening child health inequalities, our findings suggest significant levels of unmet need among CYP living in more deprived areas of England.

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