Cost-effectiveness of England's national 'Safe At Home' scheme for reducing hospital admissions for unintentional injury in children aged under 5.

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Abstract

Background

Injuries in children aged under five years most commonly occur in the home and disproportionately affect those living in the most disadvantaged communities. The ‘Safe at Home’ (SAH) national home safety equipment scheme, which ran in England between 2009-2011, has been shown to reduce injury-related hospital admissions, but there is little evidence of cost-effectiveness.

Materials and methods

Cost-effectiveness analysis from a health and local government perspective. Measures were the incremental cost-effectiveness ratio per hospital admission averted (ICER) and cost-offset ratio (COR), comparing SAH expenditure to savings in admission expenditure. The study period was split into three periods: T1 (years 0-2, implementation); T2 (years 3-4); and T3 (years 5-6). Analyses were conducted for T2 vs T1 and T3 vs T1.

Results

Total cost of SAH was £9,518,066 GBP. 202,223 hospital admissions in the children occurred during T1-3, costing £3,320,000. Comparing T3 to T1 SAH reduced admission expenditure by £924 per month per local authority and monthly admission rates by 0.5 per local authority per month compared with control areas. ICER per admission averted was £4,209 for T3 vs T1, with a COR of £0.29, suggesting that 29p was returned in savings on admission expenditure for every pound spent on SAH.

Conclusion

SAH was effective at reducing hospital admissions due to injury and did result in some cost-recovery when taking into admissions only. Further analysis of its cost-effectiveness, including emergency healthcare, primary care attendances, and wider societal costs, is likely to improve the return on investment further.

What is already known on this topic:

Annually in England, 370,000 emergency department attendances, 40,000 hospital admissions, and 55 deaths are associated with injuries among children aged under 5. These most commonly occur in the home and disproportionately affect those living in the most disadvantaged communities. Between 2009-2011, a national home safety equipment scheme was run which reduced injury-related hospital admissions.

What this study adds:

This study demonstrates that the national home safety equipment scheme reduced admission expenditure by £924 per month per local authority, however the costs to run the scheme meant that only a small amount invested was returned in cost-savings associated with admission expenditure.

How this study might affect research, practice or policy:

The national home safety equipment scheme reduced hospital admissions, and is likely to have reduced other attendances at emergency departments, primary care, and walk-in centres. Our estimates of cost-effectiveness are conservative, and the gains associated with the scheme are likely to be greater.

Introduction

Unintentional injuries result in approximately 370 000 emergency department attendances, 40 000 hospital admissions and 55 deaths amongst children aged under 5 annually in England. (1) Most of these injuries occur at home, and most are preventable. (2) Those with a lower socio-economic status carry the burden of these injuries, with a 38% higher hospital admission rate for children living in the most deprived compared to the least deprived areas. (1)

The National Institute for Health and Care Excellence (NICE) guidelines on preventing unintentional injuries in the under-15s recommend home safety assessments, the supply and installation of home safety equipment and education and advice for families where children are at greatest injury risk. This includes families with children aged under 5, those living in rented or overcrowded conditions or those living on a low income. (3) These types of home safety interventions have been shown to increase safety equipment possession and use, improve home safety behaviours and reduce injuries. (4-10) Economic evaluations of interventions to promote smoke alarm use (11-14), fire safety practices (15), thermostatic mixer valve use (16), and poison prevention practices (17) have been shown to be cost-effective, but there is little evidence of the cost-effectiveness of home safety interventions aimed at reducing a wide range of injuries. (4)

One such intervention was the Safe At Home (SAH) National Home Safety Equipment Scheme (https://www.rospa.com/home-safety/advice/safe-at-home), delivered between 2009 and 2011. The SAH scheme was designed and implemented by the Royal Society for the Prevention of Accidents (RoSPA) on behalf of the Department for Education. One hundred and thirty local authorities in England participated in the SAH scheme. These local authorities were chosen based on hospital admission rates for injuries in the under 5s that were higher than the national average rate. The SAH scheme provided home safety assessments, advice and supplied and fitted a range of home safety equipment to disadvantaged families with children aged under 5 who were receiving means-tested state financial support. (18) The SAH scheme has previously been shown to significantly reduce hospital admission rates, (5) reaching families with children at increased injury risk (19) with high levels of parent satisfaction, (20) equipment use and other safety behaviours. (19) However, no economic evaluation of the SAH scheme has been conducted to date. The aim of this study was therefore to investigate the cost-effectiveness of the SAH scheme for the prevention of hospital admissions in England compared to control areas which did not receive the SAH scheme.

Methods

Objectives

The objectives of this study were to:

- Estimate the cost of delivering the intervention in SAH local authorities (LAs).
- Estimate hospital admission rates and associated expenditure in SAH and control LAs while SAH was implemented.
- Estimate differences between hospital admissions and associated expenditure in both areas over a four-year follow-up period.
- Estimate the cost-effectiveness of the SAH scheme.

Population

Children aged under 5 years old living in England (intervention and control LAs) and Wales (control LAs only) between 1st April 2009 and 31st March 2015.

Intervention

Delivered between 01/04/2009 and 31/03/2011, the SAH scheme provided home safety equipment and advice to disadvantaged families with children aged under 5 who were receiving means-tested state financial support in 130 LAs in England. (5, 18) Data were reported at the Lower-layer Super Output Area (LSOA) level, a geographical areas of 1,000-1,500 population within LA boundaries. (24) LSOAs within English LAs that implemented SAH were identified as intervention LSOAs, however this was only possible for 121 LAs.

Over 66,000 families received safety equipment, and 282,000 families received information alone. The scheme included training for staff, home risk assessments, advice and education for parents and free provision and installation of safety equipment including safety gates, fireguards, window restrictors, non-slip bath/shower mats, kitchen cupboard locks, corner cushions and blind cord shorteners. Participating families could decline recommended equipment. (18)

Comparator

The comparator was usual care, defined as families with children aged under 5 not residing within LAs participating in the SAH scheme and therefore not receiving SAH scheme advice or equipment. Welsh local authorities, and English local authorities that did not implement SAH were defined as controls. Each intervention LSOA was matched to one control LSOA using 1:1 nearest neighbour matching using a propensity score, details of which we provide elsewhere. (5) 222 LAs were matched as controls, 200 in England and 22 in Wales.

Outcomes

The effectiveness of SAH was captured using data on hospital admissions for unintentional injuries, defined as having an admission coded as an unintentional injury which could plausibly occur in the home in children aged 0-4 years. Admissions for intentional injuries, injuries occurring outside the home (e.g. pedestrian injuries), and undetermined / unspecified injuries were excluded.

Data

Hospital admission data for England was obtained from UK National Health Service (NHS) Digital Hospital Episode Statistics (HES) in Admitted Patient Care (APC) data, and for Wales from the Secure Anonymised Information Linkage (SAIL) Databank in Patient Episode Database for Wales (PEDW) data. The Royal Society for the Prevention of Accidents (RoSPA) provided anonymised data on families who received the SAH scheme, while mid-year population estimates for children aged between zero and four years old in England and Wales were obtained from the Office for National Statistics (ONS). All data were stored securely within the SAIL Databank, part of the Secure eResearch Platform (SeRP).

Study design

We performed a cost-effectiveness analysis from an NHS and local authority perspective, based on data from a controlled interrupted time series study evaluating the impact of the scheme on hospital admission rates. (5) The key criteria for the evaluation can be found in Table 1.

Patient and Public Involement

Two colleagues from RoSPA were involved with the design of the study, costing of the SAH scheme, and interpretation of results.

Costing the Safe at Home scheme

Unit prices for home safety equipment in 2009/2010 were provided by RoSPA, and were inflated to 2018/2019 prices using the Hospital Pay and Prices Index (HPPI). (21) Unit prices for equipment are given in Appendix 1. Other included costs were installation cost (a flat fee applied when at least one piece of equipment was fitted), provision of home safety advice, equipment storage and delivery, staff salary, and staff training. The SAH intervention was intended to be delivered between 1/4/2009 and 31/3/2011. Any installation dates reported before or after these dates were assumed to be installed on the first/last date respectively.

Costing hospital admissions

Hospital admission injury and treatment codes were grouped into the relevant Health Resource Groups (HRGs), which are standard groupings of ICD-10 diagnoses and OPCS procedures that have similar resource implications for the NHS, taking into account length of stay. HRG codes were grouped by fiscal year, then mapped to the relevant NHS Reference Costs for England. (22, 23) Where a specific HRG was not identified, the average cost across all HRGs for that particular year was applied, as recommended by the NHS Reference Cost Team. (23) All healthcare expenditure was then inflated to 2018/2019 prices using the Hospital Pay and Prices Index (HPPI). (21)

Analytical strategy

Data were aggregated to LA level to be representative for decision makers. Expenditure on admissions and the SAH intervention were estimated at the LA level, while for admission rates, we defined a 'typical' LA as having 10,078 children aged 0-4 years based on an estimated 3,507,201 children aged 0-4 years across 348 LAs in England and Wales in 2011. (25, 26) All monthly admission rates and monthly healthcare expenditure were split into the three time periods: T1 (implementation, 1/4/2009to 31/3/2011), T2 (first follow-up, 1/4/2011 to 31/3/2013), and T3 (second follow-up, 1/4/2013 to 31/3/2015). T1 represents the two year implementation period when families could access the SAH scheme, and this was used as the comparison time period for the analysis. All monthly SAH scheme costs were attributed to this time-period. The four years of follow-up was split into two periods as some items of equipment (e.g. stairgates) are recommended for use in children up to two years of age, while the other items of equipment supplied by SAH may be required for longer periods.

For each LA, we estimated the monthly average admission rates, hospital admission expenditure, and scheme costs (intervention LAs only). We did this for each of the pre-defined time periods and for all intervention and control LAs, separately. We examined differences in hospital expenditure and admission rates separately for intervention and control LAs by subtracting values for follow-up time periods (T2 and T3) from values for the implementation period (T1). Values for differences in hospital expenditure and admission rates for intervention LAs were then subtracted from control LAs.

We calculated the incremental cost-effectiveness ratio (ICER) per hospital admission averted at either T2 or T3, relative to implementation at T1 and the cost-offset ratio (COR), which measured scheme expenditure compared with changes in hospital admission expenditure at either T2 or T3 compared with T1.

Sub-group and sensitivity analyses

Sub-group analyses were performed by stratifying by socio-economic deprivation tertiles using 2001 Townsend Scores. (27) We also conducted a probabilistic sensitivity analysis, details of which can be found in Table 1.

Secondary analyses

In line with other studies, we conducted a secondary analysis using a more restrictive code list for hospital admissions which included only injuries which could have been plausibly prevented by the SAH scheme equipment. (5, 6, 28, 29) The code list can be found elsewhere.(30) Cord winders were excluded in this analysis because we did not identify any recorded injuries which could have been prevented, and the costs associated with these were removed.

Results

Data from 65,970 families that took part in SAH were included in the costing analysis, with a total cost of implementing SAH of £9,518,066 (Appendix A2). 98.5% of hospital admissions were mapped to an appropriate HRG, otherwise an average cost was applied (Appendix A3). The total number of hospital admissions reported in the six-year study period across all LAs was 202,223 (107,808 in intervention LAs, 94,415 in control LAs), at a total cost of £62,104,032 (£31,322,637 in intervention LAs, £30,781,395 in control LAs).

The SAH scheme was associated with a reduction in hospital admission expenditure and hospital admission rates within intervention LAs compared with control LAs (basecase analysis, Table 2). For T2 vs T1, a £490 reduction in admission expenditure per LA per month and a 0.4 reduction in admissions per LA per month was observed between intervention and control areas, which increased to a £924 reduction in admission expenditure per LA per month and a 0.5 reduction in admissions per LA per month for T3 vs T1. The cost of delivering SAH was greater than hospital expenditure reductions for both T2 vs T1 and T3 vs T1. The ICER per admission averted was £6,862 for T2 vs T1, decreasing to £4,209 for T3 vs T1. CORs were £0.15 for T2 vs T1 and £0.29 for T3 vs T1, suggesting that for every pound spent on the SAH scheme, 15p and 29p respectively was returned in hospital admissions savings.

The probabilistic sensitivity analysis (Appendix A4) found that reductions in hospital admissions and associated expenditure were significant (i.e. 95% CIs did not cross zero), but the 95% CIs for the ICERs were wide, suggesting sizeable decision uncertainty. Cost-effectiveness acceptability curves suggested there was a 90% chance at T1 and 98% chance at T2 that SAH was cost-effective if a LA was willing to spend £20,000 to avert a hospital admission (see Figure 1). Scatterplots suggested that in most cases the SAH scheme led to a reduction in hospital admissions, although there were some scenarios were it was estimated to have no effect (see Appendix 5).

Sub-group analyses

SAH was a targeted scheme, therefore most of the costs were seen in the most socio-economically deprived LAs (Table 2), but these LAs also had the largest reductions in hospital admissions. The scheme cost remained greater than any reductions in expenditure. ICERs per admission averted in the basecase analysis for the most deprived tertile were £17,086 (COR £0.12) for T2 vs T1, and £4,869 (COR £0.06) for T3 vs T1. Although the probabilistic sensitivity analysis findings were similar, 95% CIs were wider such that only in T3 vs T1 for the most deprived tertile was there evidence of a reduction in admissions.

Secondary analysis – equipment preventable injuries

Findings were similar to the main analysis with the SAH scheme leading to reductions in hospital admissions and expenditure (see Table 3 and Appendicies 6 to 8). The main difference in the secondary verses primary analyses was that reductions in expenditure / admissions (and hence greater returns) were now found in T2 vs T1 rather than T3 vs T1. When stratifying by socio-economic deprivation, the greatest reductions were observed in high deprivation LAs as in the primary analysis.

Discussion

The SAH scheme appears to be cost-effective for reducing hospital admissions, although the costs of the intervention are greater than savings in admission expenditure alone. As SAH was a scheme targeted at those with high deprivation, the greatest reduction in admissions was seen in those areas, but with a high intervention cost. Our analysis did not consider other costs such as emergency department attendances, minor injury units, primary care visits, NHS walk-in centres, education or social care so our study is likely to underestimate the benefits of the SAH scheme across the wider health, education and social care sectors.

Strengths and limitations

This study used routinely collected data to capture the impact of a national home safety assessment and equipment scheme on hospital admissions for injury in a real-world setting. It would be logistically difficult and extremely costly to conduct a sufficiently large randomised controlled trial to evaluate such a scheme using hospital admission as the primary outcome measure. In comparison, we have been able to conduct a robust quasi-experimental controlled evaluation at reduced expense. The data were time-aggregated, the time series design ensured the intervention exposure preceded the outcomes, which reduces the potential for reverse causality. Furthermore, using hospital admissions data and linked data on equipment provision reduced the potential for biases from parental reports of injuries incurred or equipment provided.

We have focused only on hospital admissions and have excluded other types of medically attended injury due to a lack of high-quality data on specific injury mechanisms from emergency department attendances, minor injury units, primary care visits, or NHS walk-in centres across England and Wales. It is likely that the SAH scheme had an impact on such health care utilisation, as previous studies have shown similar interventions reduced physician visits and emergency department attendances. (4, 6, 10, 31) Wider impacts would also include productivity losses associated with parents taking time off work to care for their child and out of pocket costs to parents, for example for travel to hospitals and for over the counter purchases. (32) Hence, our study will have underestimated the potential benefit from the SAH scheme, especially around healthcare cost-savings. Furthermore, policy makers such as NICE focus on direct costs and do not include productivity losses in their decision making. (33)

Healthcare policy decision-making within England and Wales usually requires data on quality adjusted life years, based on the EQ-5D.(33) Presently, EQ-5D is unsuitable for use in children under the age of 5 years. Other paediatric quality of life tools have been used in injured children (34-36), but no mapping to EQ-5D exists. Therefore, it was not possible to collect and incorporate quality of life data into our evaluation.

In context with the literature

To our knowledge, this is the first economic evaluation of a national home safety equipment scheme using real world data. Previous interventions to reduce unintentional injuries have tended to focus on one type of injury e.g. burns associated with fire (11-15, 37), scalds (16, 38), and poisonings. (17) All but one of these interventions were found to be cost-effective. (37) Only two studies have investigated interventions aimed at reducing a wide range of injuries, (4, 39) and the findings from both studies are consistent with ours. An evaluation of the English Sure Start programme which included home safety education, found the intervention significantly reduced hospitalisations for injuries and poisoning in the under-5s, but the financial benefits from reduced hospitalisations for all causes offset approximately 31% of the provision cost of Sure Start. A second study evaluating a Canadian home visiting programme providing safety advice and discount coupons for safety equipment found the intervention decreased hospital expenditure in the intervention areas, but cost more to deliver than it saved ($372 per injury avoided). (4)

Implications for policy

Whilst we were not able to incorporate emergency department utilisation data in our analysis, we can make some estimate of the impact of the SAH scheme on emergency department attendance and its associated cost. It has been estimated that 370,000 children aged under-5 attend emergency departments each year in England following unintentional injury. (1) The average cost of an emergency department attendance in 2018/2019 was £166 per attendance. (40) Focusing on intervention LAs only (38% of LAs in England), and assuming that the SAH scheme is at least as effective at reducing emergency department attendances as hospital admissions, we would expect an approximate 4% reduction in injury attendances, preventing 5,561 emergency department attendances annually and saving £923,207 per year in England. If this is added to the savings from hospital admissions (£1,364,459 per year), this equates to £2,287,666 per year. The estimated total cost per year for delivering SAH was £4,758,624 for the 121 intervention LAs, suggesting a potential return of investment of £0.48 for every pound spent on SAH. This is still likely to be an underestimate of the benefit of the SAH scheme, as further savings may also be realised from other sectors such as primary care, minor injury units, walk-in centres, education and social care.

Conclusion

Over four years after SAH was implemented, intervention areas experienced reduced hospital admissions and associated expenditure, suggesting that SAH was effective. However, any savings were outweighed by the intervention cost. Further investigation of reductions in other healthcare areas is likely to improve the return on investment further.

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Competing interests: Authors MCW, CC and DK previously evaluated the Safe At Home scheme in a study funded by RoSPA and published in 2011: https://www.rospa.com/rospaweb/docs/advice-services/home-safety/final-evaluation-reportsafe-at-home.pdf. RoSPA received funding from the UK government to manage and implement the Safe At Home scheme. They provided an advisory role in this study and did not directly analyse the data. All other authors have no conflicts of interests to disclose.

Ethics approval: Approval for the use of anonymised data in this study, provisioned within the Secure Anonymised Information Linkage (SAIL) Databank, was granted by an independent Information Governance Review Panel (IGRP) under project 0458 The IGRP has a membership composed of senior representatives from the British Medical Association (BMA), the National Research Ethics Service (NRES), Public Health Wales and NHS Wales Informatics Service (NWIS). Usage of additional data was granted by data owner. The SAIL Databank is General Data Protection Regulation (GDPR) and the UK Data Protection Act compliant.

Data availability statement: Data may be obtained from a third party and are not publicly available. The data used in this study are available in the SAIL Databank at Swansea University, Swansea, UK, but as restrictions apply, they are not publicly available. All proposals to use SAIL data are subject to review by an independent Information Governance Review Panel (IGRP). Before any data can be accessed, approval must be given by the IGRP. The IGRP gives careful consideration to each project to ensure proper and appropriate use of SAIL data. When access has been granted, it is gained through a privacy protecting safe haven and remote access system referred to as the SAIL Gateway. SAIL has established an application process to be followed by anyone who would like to access data via SAIL at https://www.saildatabank.com/application-process. The HES Data (copyright 2021) was reused with the permission of the Health and Social Care Information Centre. All rights reserved. Data sharing agreement number DARS-NIC-50919-D5R5D-V1.4.

Tables and Figures

Figure 1: Cost-effectiveness acceptability curve for Safe at Home intervention for first post implementation and second post implementation periods based upon the probabilistic sensitivity analysis for the primary analysis of all injury

Table 1: Key criteria of the economic evaluation

Decision problems	Is the Safe at Home (SAH) home safety scheme cost-effective for the prevention of hospital admissions in England
Evaluation type	Cost-effectiveness analysis conducted alongside a time series observational study
Population	All children aged zero to four years of age in England and Wales between 1st April 2009 and 31st March 2015
Setting and perspective	Local authorities in England and Wales. NHS and local authority perspective.
Time Horizon	Six Years – Implementation period (T1: Months 1-24), first follow-up period (T2: Months 25-48), second follow-up period (T3: Months 49-72)
Costs	Intervention costs included equipment (see Table A1 in Appendices for unit prices), installation of equipment, storage and delivery of equipment, staff training.
Consequences	Healthcare expenditure per local authority on hospital admissions for unintentional injuries, rate of hospital admissions for unintentional injuries per local authority
Discounting	All costs discounted at 3.5% per annum from 1st April 2009
Sensitivity analyses	Probabilistic sensitivity analysis (PSA) using bootstrapping with 1,000 repetitions of monthly hospital admission rates, hospital admission expenditure, and monthly scheme costs separately for each time-period for control and intervention LAs. Results of the PSA were plotted as scatterplots and cost-effectiveness acceptability curves per hospital admission averted.

Table 2: Basecase results for the primary analysis of the SAH scheme (GBP (£), 2018/2019 prices)

	Monthly average scheme cost per LA (£)	Monthly average hospital expenditure per LA (£)		Difference in monthly hospital expenditure per LA (£)		*Incremental difference in monthly hospital expenditure per LA (£)*	*Cost-offset ratio (COR (£))*	Monthly average hospital admission rate per LA		Difference in monthly hospital admission rate per LA		*Incremental difference in monthly hospital inpatient admission rate per LA*	*Incremental cost per admission averted (ICER) (£)*
		Controls	Interventions	Controls	Interventions			Controls	Interventions	Controls	Interventions		
All areas													
T1	3,224	6,254	13,370					12.009	13.920				
T2		6,427	13,053	173	-317	*490*	*0.15*	12.286	13.799	0.278	-0.121	*0.399*	*6,862*
T3		6,008	12,200	-245	-1,170	*924*	*0.29*	12.156	13.521	0.148	-0.399	*0.546*	*4,209*
Low deprivation													
T1	1,322	4,089	9,720					10.638	11.732				
T2		4,135	8,998	46	-722	*767*	*0.58*	11.145	11.473	0.507	-0.259	*0.766*	*725*
T3		3,817	8,672	-273	-1,047	*775*	*0.59*	10.985	11.910	0.347	0.178	*0.169*	*3,235*
Medium deprivation													
T1	2,939	4,188	9,997					12.251	13.761				
T2		4,235	9,255	47	-742	*789*	*0.27*	12.487	13.802	0.236	0.041	*0.195*	*11,056*
T3		3,909	8,920	-279	-1,077	*798*	*0.27*	12.366	13.806	0.115	0.046	*0.069*	*30,882*
High deprivation													
T1	4,895	6,685	6,729					12.952	15.175				
T2		6,759	6,229	75	-500	*574*	*0.12*	13.053	15.023	0.101	-0.152	*0.253*	*17,086*
T3		6,239	6,004	-446	-725	*279*	*0.06*	12.926	14.201	-0.026	-0.974	*0.948*	*4,869*

Table 3: Results for the secondary analysis of the SAH scheme on equipment preventable injuries (GBP (£), 2018/2019 prices)

	Monthly average scheme cost per LA (£)	Monthly average hospital expenditure per LA (£)		Difference in monthly hospital expenditure per LA (£)		*Incremental difference in monthly hospital expenditure per LA (£)*	*Cost-offset ratio (COR (£))*	Monthly average hospital admission rate per LA		Difference in monthly hospital admission rate per LA		*Incremental difference in monthly hospital admission rate per LA*	*Incremental cost per admission averted (ICER) (£)*
		Controls	Interventions	Controls	Interventions			Controls	Interventions	Controls	Interventions		
All areas													
T1	3,182	1,822	3,712					3.288	3.759				
T2		2,137	3,488	316	-224	*539*	*0.17*	3.816	3.671	0.528	-0.088	0.616	*4,291*
T3		1,871	3,325	49	-387	*436*	*0.14*	3.515	3.579	0.227	-0.180	0.407	*6,744*
Low deprivation													
T1	1,689	1,054	2,892					2.790	3.0528				
T2		1,237	2,685	183	-207	*390*	*0.23*	3.404	3.036	0.615	-0.017	0.632	*2,056*
T3		1,119	2,468	65	-424	*489*	*0.29*	3.167	3.163	0.378	0.111	0.267	*4,494*
Medium deprivation													
T1	2,639	2,092	2,796					3.435	3.724				
T2		2,309	2,618	217	-179	*395*	*0.15*	3.879	3.676	0.445	-0.048	0.493	*4,553*
T3		2,148	2,648	56	-149	*205*	*0.08*	3.634	3.682	0.200	-0.042	0.242	*10,082*
High deprivation													
T1	4,328	2,814	4,962					3.550	4.158				
T2		3,527	4,692	713	-270	*983*	*0.23*	4.100	4.007	0.550	-0.152	0.701	*4,769*
T3		2,822	4,407	7	-555	*562*	*0.13*	3.666	3.740	0.116	-0.418	0.533	*7,045*

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