

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

3
4 Matthew Jones,¹ Trevor Hill,¹ Carol Coupland,¹ Denise Kendrick,¹ Ashley Akbari,² Sarah
5 Rodgers,³ Michael Watson,⁴ Edward Tyrrell,¹ Sheila Merrill,⁵ Ashley Martin,⁵ Elizabeth
6 Orton.¹

7
8 1 Centre for Academic Primary care, Unit of Lifespan and Population Health, Applied Health
9 Research Building, University Park, Nottingham, NG7 2RD, UK.

10
11 2 Population Data Science, Swansea University Medical School, Faculty of Medicine, Health
12 & Life Science, Swansea University, Singleton Park Campus, Swansea, SA2 8PP, UK.

13
14 3 Department of Public Health, Policy & Systems, Waterhouse Building, University of
15 Liverpool, L69 3GL, UK

16
17 4 Institute of Health Promotion and Education, Lichfield, UK

18
19 5 Royal Society for the Prevention of Accidents (RoSPA), Edgbaston, Birmingham, B15 1RP
20 UK

21
22
23 Corresponding author: Dr Matthew Jones
24 Email: matthew.jones3@nottingham.ac.uk

25
26 Keywords: Unintentional injury, safety equipment, children, cost-effectiveness

27
28 **Abstract:** 246

29
30 **Word count:** 2,998
31

32 **Abstract**

33

34 **Background**

35 Injuries in children aged under five years most commonly occur in the home and
36 disproportionately affect those living in the most disadvantaged communities. The 'Safe
37 at Home' (SAH) national home safety equipment scheme, which ran in England between
38 2009-2011, has been shown to reduce injury-related hospital admissions, but there is little
39 evidence of cost-effectiveness.

40

41 **Materials and methods**

42 Cost-effectiveness analysis from a health and local government perspective. Measures
43 were the incremental cost-effectiveness ratio per hospital admission averted (ICER) and
44 cost-offset ratio (COR), comparing SAH expenditure to savings in admission expenditure.
45 The study period was split into three periods: T1 (years 0-2, implementation); T2 (years
46 3-4); and T3 (years 5-6). Analyses were conducted for T2 vs T1 and T3 vs T1.

47

48 **Results**

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

55

56 **Conclusion**

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

61

62 **What is already known on this topic:**

63

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

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71 **What this study adds:**

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

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79 **How this study might affect research, practice or policy:**

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

85

86 **Introduction**

87 Unintentional injuries result in approximately 370 000 emergency department
88 attendances, 40 000 hospital admissions and 55 deaths amongst children aged under 5
89 annually in England. (1) Most of these injuries occur at home, and most are preventable.
90 (2) Those with a lower socio-economic status carry the burden of these injuries, with a
91 38% higher hospital admission rate for children living in the most deprived compared to
92 the least deprived areas. (1)

93
94 The National Institute for Health and Care Excellence (NICE) guidelines on preventing
95 unintentional injuries in the under-15s recommend home safety assessments, the supply
96 and installation of home safety equipment and education and advice for families where
97 children are at greatest injury risk. This includes families with children aged under 5, those
98 living in rented or overcrowded conditions or those living on a low income. (3) These types
99 of home safety interventions have been shown to increase safety equipment possession
100 and use, improve home safety behaviours and reduce injuries. (4-10) Economic
101 evaluations of interventions to promote smoke alarm use (11-14), fire safety practices
102 (15), thermostatic mixer valve use (16), and poison prevention practices (17) have been
103 shown to be cost-effective, but there is little evidence of the cost-effectiveness of home
104 safety interventions aimed at reducing a wide range of injuries. (4)

105
106 One such intervention was the Safe At Home (SAH) National Home Safety Equipment
107 Scheme (<https://www.rospa.com/home-safety/advice/safe-at-home>), delivered between
108 2009 and 2011. The SAH scheme was designed and implemented by the Royal Society for
109 the Prevention of Accidents (RoSPA) on behalf of the Department for Education. One
110 hundred and thirty local authorities in England participated in the SAH scheme. These local
111 authorities were chosen based on hospital admission rates for injuries in the under 5s that
112 were higher than the national average rate. The SAH scheme provided home safety
113 assessments, advice and supplied and fitted a range of home safety equipment to
114 disadvantaged families with children aged under 5 who were receiving means-tested state
115 financial support. (18) The SAH scheme has previously been shown to significantly reduce
116 hospital admission rates, (5) reaching families with children at increased injury risk (19)
117 with high levels of parent satisfaction, (20) equipment use and other safety behaviours.
118 (19) However, no economic evaluation of the SAH scheme has been conducted to date.
119 The aim of this study was therefore to investigate the cost-effectiveness of the SAH
120 scheme for the prevention of hospital admissions in England compared to control areas
121 which did not receive the SAH scheme.

122
123 **Methods**

124
125 *Objectives*

126 The objectives of this study were to:

- 127
- 128 • Estimate the cost of delivering the intervention in SAH local authorities (LAs).
 - 129 • Estimate hospital admission rates and associated expenditure in SAH and control
130 LAs while SAH was implemented.
 - 131 • Estimate differences between hospital admissions and associated expenditure in
132 both areas over a four-year follow-up period.
 - 133 • Estimate the cost-effectiveness of the SAH scheme.
- 134

135 *Population*

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

138
139 *Intervention*

140 Delivered between 01/04/2009 and 31/03/2011, the SAH scheme provided home safety
141 equipment and advice to disadvantaged families with children aged under 5 who were
142 receiving means-tested state financial support in 130 LAs in England. (5, 18) Data were

143 reported at the Lower-layer Super Output Area (LSOA) level, a geographical areas of
144 1,000-1,500 population within LA boundaries. (24) LSOAs within English LAs that
145 implemented SAH were identified as intervention LSOAs, however this was only possible
146 for 121 LAs.

147

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

154

155 *Comparator*

156 The comparator was usual care, defined as families with children aged under 5 not residing
157 within non SAH participating LAs participating, thusly not receiving SAH scheme advice or
158 equipment. Controls were all Welsh LAs and English LAs that did not. Each intervention LA
159 was matched to one control LA using 1:1 nearest neighbour matching using a propensity
160 score, details of which we provide elsewhere. (5) 222 LAs were matched as controls, 200
161 in England and 22 in Wales.

162

163

164 *Outcomes*

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

170

171 *Data*

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

180

181 *Study design*

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

186

187 *Patient and Public Involvement*

188

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

191

192 *Costing the Safe at Home scheme*

193 Unit prices for home safety equipment in 2009/2010 were provided by RoSPA (see
194 Appendix A1), and were inflated to 2018/2019 prices. (21) Other included costs were
195 installation cost (a flat fee applied when at least one piece of equipment was fitted),
196 provision of home safety advice, equipment storage and delivery, staff salary, and staff
197 training. The SAH intervention was intended to be delivered between 1/4/2009 and
198 31/3/2011, therefore any installation dates reported before or after these dates were
199 assumed to be installed on the first/last date respectively.

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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, OPCS procedures and 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. (21)

Analytical strategy

Data were aggregated to LA level to be representative for decision makers. Expenditure on admissions and intervention were estimated at a LA level. 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, 1/4/2009 to 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.

A detailed description of the analysis can be found in Appendix A2. Briefly, for each time period and control / intervention LAs, we estimated the monthly average admission rates per LA, monthly admission expenditure per LA, and monthly scheme costs per LA (intervention LAs only). Next, we estimated the difference in monthly admission rates and expenditure for intervention and control LAs by subtracting values for follow-up time periods (T2 and T3) from the implantation period (T1) values. Finally we estimated the incremental difference in monthly admission rates and expenditure by subtracting the differences in monthly admission rates / expenditure for intervention LAs 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 A3). 98.5% of hospital admissions were mapped to an appropriate HRG, otherwise an average cost was applied (Appendix A4). The total number of hospital admissions reported in the six-year study

257 period across all LAs was 202,223 (107,808 in intervention LAs, 94,415 in control LAs), at
258 a total cost of £62,104,032 (£31,322,637 in intervention LAs, £30,781,395 in control LAs).
259

260 SAH scheme LAs had a greater reduction in admission expenditure and admission rates
261 compared to control LAs (basecase analysis, Table 2). For T2 vs T1, intervention LAs saved
262 £490 in monthly admission expenditure per LA when compared to control LAs, with a 0.4
263 reduction in admissions per LA per month. This increased to a £924 saving in admission
264 expenditure per LA per month and a 0.5 reduction in admissions per LA per month for T3
265 vs T1. However, the intervention cost was greater than the savings for both T2 vs T1 and
266 T3 vs T1, with an estimated ICER per admission averted of £6,862 for T2 vs T1 and £4,209
267 for T3 vs T1. CORs were £0.15 for T2 vs T1 and £0.29 for T3 vs T1, suggesting that for
268 every pound spent on the SAH scheme, 15p and 29p respectively was returned in hospital
269 admissions savings.
270

271 The probabilistic sensitivity analysis (Appendix A5) found significant (i.e. 95% CIs did not
272 cross zero) reductions in admissions and associated expenditure, but there was sizeable
273 uncertainty as the 95% CIs for the ICERs were wide. There was a 90% chance that SAH
274 was cost-effective at T2, increasing to 98% chance at T3, if a LA was willing to spend
275 £20,000 to avert an admission (see Figure 1). The probabilistic sensitivity analysis found
276 that in most cases there was a reduction in hospital admissions, but there were some
277 scenarios where SAH had no effect (see Scatterplots in Appendix A6).
278

279 *Sub-group analyses*

280 SAH was a targeted scheme, hence the most socio-economically deprived had the highest
281 monthly intervention cost per LA (Table 2). But these LAs also had the largest reductions
282 in admissions, although intervention cost was greater than any savings. For the most
283 deprived tertiles, ICERs per admission averted were £17,086 (COR £0.12) for T2 vs T1,
284 and £4,869 (COR £0.06) for T3 vs T1. Probabilistic sensitivity analysis findings were
285 similar, but with wider 95% CIs meaning that only in T3 vs T1 had a significant reduction
286 in admissions.
287

288 *Secondary analysis – equipment preventable injuries*

289 Findings were similar to the main analysis with the SAH scheme leading to reductions in
290 admissions and expenditure (see Table 3 and Appendices 7 to 9), which included the
291 greatest reductions observed in the most deprived tertile. The main difference in the
292 secondary versus primary analyses was that reductions in expenditure / admissions (and
293 hence greater returns) were now found in T2 vs T1 rather than T3 vs T1.
294

295 **Discussion**

296 The SAH scheme appears to be cost-effective for reducing hospital admissions, although
297 the costs of the intervention are greater than savings in admission expenditure alone. As
298 SAH was a scheme targeted at those with high deprivation, the greatest reduction in
299 admissions was seen in those areas, but with a high intervention cost. Our analysis did
300 not consider other costs such as emergency department attendances, minor injury units,
301 primary care visits, NHS walk-in centres, education or social care so our study is likely to
302 underestimate the benefits of the SAH scheme across the wider health, education and
303 social care sectors.
304

305 *Strengths and limitations*

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

314 and linked data on equipment provision reduced the potential for biases from parental
315 reports of injuries incurred or equipment provided.

316
317 We have focused only on hospital admissions and have excluded other types of medically
318 attended injury due to a lack of high-quality data on specific injury mechanisms from
319 emergency department attendances, minor injury units, primary care visits, or NHS walk-
320 in centres across England and Wales. It is likely that the SAH scheme had an impact on
321 such health care utilisation, as previous studies have shown similar interventions reduced
322 physician visits and emergency department attendances. (4, 6, 10, 31) Wider impacts
323 would also include productivity losses associated with parents taking time off work to care
324 for their child and out of pocket costs to parents, for example for travel to hospitals and
325 for over the counter purchases. (32) However, policy makers such as NICE focus on direct
326 costs and do not include productivity losses in their decision making. (33) Additionally,
327 other economic and public health policies may have impacted on families behaviour, for
328 example a parent may have become unemployed during the 2009 financial crisis which
329 would have reduced injuries as the parent was at home more. Unfortunately, data is not
330 available to enable a comparison of characteristics of intervention and control LAs to
331 control for any differences in policy. Overall it is likely that our study will have
332 underestimated the potential benefit from the SAH scheme, especially around healthcare
333 cost-savings.

334
335 Healthcare policy decision-making within England and Wales usually requires data on
336 quality adjusted life years, based on the EQ-5D.(33) Presently, EQ-5D is unsuitable for
337 use in children under the age of 5 years. Other paediatric quality of life tools have been
338 used in injured children (34-36), but no mapping to EQ-5D exists. Therefore, it was not
339 possible to collect and incorporate quality of life data into our evaluation.

340
341 *In context with the literature*
342 To our knowledge, this is the first economic evaluation of a national home safety
343 equipment scheme using real world data. Previous interventions to reduce unintentional
344 injuries have tended to focus on one type of injury e.g. burns associated with fire (11-15,
345 37), scalds (16, 38), and poisonings. (17) All but one of these interventions were found to
346 be cost-effective. (37) Only two studies have investigated interventions aimed at reducing
347 a wide range of injuries, (4, 39) and the findings from both studies are consistent with
348 ours. An evaluation of the English Sure Start programme which included home safety
349 education, found the intervention significantly reduced hospitalisations for injuries and
350 poisoning in the under-5s, but the financial benefits from reduced hospitalisations for all
351 causes offset approximately 31% of the provision cost of Sure Start. A second study
352 evaluating a Canadian home visiting programme providing safety advice and discount
353 coupons for safety equipment found the intervention decreased hospital expenditure in
354 the intervention areas, but cost more to deliver than it saved (\$372 per injury avoided).
355 (4)

356
357 *Implications for policy*
358
359 Whilst we were not able to incorporate emergency department utilisation data in our
360 analysis, we can make some estimate of the impact of the SAH scheme on emergency
361 department attendance and its associated cost. It has been estimated that 370,000
362 children aged under-5 attend emergency departments each year in England following
363 unintentional injury. (1) The average cost of an emergency department attendance in
364 2018/2019 was £166 per attendance. (40) Focusing on intervention LAs only (38% of LAs
365 in England), and assuming that the SAH scheme is at least as effective at reducing
366 emergency department attendances as hospital admissions, we would expect an
367 approximate 4% reduction in injury attendances, preventing 5,561 emergency department
368 attendances annually and saving £923,207 per year in England. If this is added to the
369 savings from hospital admissions (£1,364,459 per year), this equates to £2,287,666 per
370 year. The estimated total cost per year for delivering SAH was £4,758,624 for the 121

371 intervention LAs, suggesting a potential return of investment of £0.48 for every pound
372 spent on SAH. This is still likely to be an underestimate of the benefit of the SAH scheme,
373 as further savings may also be realised from other sectors such as primary care, minor
374 injury units, walk-in centres, education and social care.

375

376 **Conclusion**

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

381

382

383 **Acknowledgements:** We would like to thank Professor Sarah Lewis for her advice about
384 the statistical methods and the Royal Society for the Prevention of Accidents for sharing
385 the safety equipment data and supporting the methodology and interpretation of this
386 analysis.

387
388 **Contributors:** EO, DK, CC, ET, MJ, SR, SM and MCW designed and obtained funding for
389 the study. MJ undertook the analysis in consultation with all authors. AA provided expert
390 advice regarding information governance and data management. All authors contributed
391 to the manuscript. EO took overall responsibility for the study.

392
393 **Funding:** This project was supported by a grant by the National Institute for Health
394 Research School of Primary Care Research (Reference Number 362). Time for SR to
395 contribute to this project was funded by The National Institute for Health Research Applied
396 Research Collaboration North West Coast (NIHR ARC NWC).

397
398 **Disclaimer:** The views expressed here are those of the author(s) and not necessarily
399 those of the NHS, the NIHR or the Department of Health and Social Care. The funder had
400 no input in the study.

401
402 **Competing interests:** Authors MCW, CC and DK previously evaluated the Safe
403 At Home scheme in a study funded by RoSPA and published in 2011:
404 [https://www.rospa.com/rospaweb/docs/advice-services/home-safety/final-evaluation-](https://www.rospa.com/rospaweb/docs/advice-services/home-safety/final-evaluation-reportsafe-at-home.pdf)
405 [reportsafe-at-home.pdf](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
406 implement the Safe At Home scheme. They provided an advisory role in this study and did
407 not directly analyse the data. All other authors have no conflicts of interests to disclose.

408
409 **Ethics approval:** Approval for the use of anonymised data in this study, provisioned
410 within the Secure Anonymised Information Linkage (SAIL) Databank, was granted by an
411 independent Information Governance Review Panel (IGRP) under project 0458 The IGRP
412 has a membership composed of senior representatives from the British Medical Association
413 (BMA), the National Research Ethics Service (NRES), Public Health Wales and NHS Wales
414 Informatics Service (NWIS). Usage of additional data was granted by data owner. The
415 SAIL Databank is General Data Protection Regulation (GDPR) and the UK Data Protection
416 Act compliant.

417
418 **Data availability statement:** Data may be obtained from a third party and are not
419 publicly available. The data used in this study are available in the SAIL Databank at
420 Swansea University, Swansea, UK, but as restrictions apply, they are not publicly
421 available. All proposals to use SAIL data are subject to review by an independent
422 Information Governance Review Panel (IGRP). Before any data can be accessed, approval
423 must be given by the IGRP. The IGRP gives careful consideration to each project to ensure
424 proper and appropriate use of SAIL data. When access has been granted, it is gained
425 through a privacy protecting safe haven and remote access system referred to as the SAIL
426 Gateway. SAIL has established an application process to be followed by anyone who would
427 like to access data via SAIL at <https://www.saildatabank.com/application-process>. The
428 HES Data (copyright 2021) was reused with the permission of the Health and Social Care
429 Information Centre. All rights reserved. Data sharing agreement number DARS-NIC-
430 50919-D5R5D-V1.4.

431 **Tables and Figures**

432

433 Figure 1: Cost-effectiveness acceptability curve for Safe at Home intervention for first
 434 post implementation and second post implementation periods based upon the
 435 probabilistic sensitivity analysis for the primary analysis of all injury
 436

437

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 1 st 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.

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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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