Corrigendum: Brief alcohol intervention for risky drinking in young people aged 14–15 years in secondary schools: the SIPS JR-HIGH RCT

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Corrigendum notice

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This paper[1] is corrected as follows:

Introduction

During independent re-analysis of the cost data for a PhD thesis, a coding error was identified in one of the sensitivity analyses of the cost-utility evaluation of the trial looking at the effect of excluding from the intervention and control costs the cost of missed school days.

Description of the error identified

Missed school days were not correctly excluded from total costs of the intervention and control arms of the trial. The monetary value (cost) assigned to missed school days reflected the potential savings from lower levels of truancy and school skipping associated with better outcomes from the trial. Because these costs were high, reflecting life-long impacts of poor educational outcomes, a sensitivity analysis was conducted to explore their independent impact on the conclusions on cost-effectiveness of the brief alcohol intervention.

After correcting for the error, the sensitivity analyses excluding the cost of missed school days show that the intervention is now dominated (more costly, less QALY gains than the control). This is because compared to the control group, the intervention group had less missed school days – the costs that were excluded in the sensitivity analyses- at follow up, and this was driving the cost-savings in the main analyses. However, results from the sensitivity analyses show that there is still a 20% probability of the intervention being cost-effective.

Corrections to *Abstract*

The final four sentences in *Abstract*, *Results*, have been corrected to the following:

Economic analysis suggested that the average net cost of the brief intervention was £79 (95% confidence interval −£104 to £260) per year compared with usual practice (results excluding costs of missed school days), with a 20% probability of the intervention being cost saving compared with usual practice.

Corrections to *Scientific summary*

The final three sentences in *Scientific summary*, *Results*, *Objectives 1–3*, *Findings*, have been corrected to the following:

Economic analysis suggested that the average net cost of the brief intervention was £79 (95% confidence interval −£104 to £260) per year compared with usual practice (results excluding costs of missed school days), with a 20% probability of the intervention being more cost-effective than usual practice.

Corrections to *Chapter 5*

The first four lines of the second paragraph in *Chapter 5*, *Sensitivity analysis of cost–utility results*, *Sensitivity analysis of cost assumptions*, have been corrected to the following:

When excluding the missed school days costs, costs for both the intervention and the control were substantially lower, but the intervention was more costly by £79. Thus, on average the intervention was both more costly and less effective than the control and, therefore, the intervention is dominated. This is compared with the base-case analysis, where the control is on average more costly and more effective than the intervention, resulting in an incremental cost per QALY of £723,048 for the control compared with the intervention. This is unsurprising given the cost of missing school days (see *Table 20*) and lower average of missing school days in the intervention group at follow up (see *Table 22*). The point estimates of costs and QALYs do not reflect the imprecision of the results and the impact of this imprecision on cost-effectiveness. This can be characterised by the CEAC.

The CEAC obtained when the cost of missed school days was excluded gave a 20% probability of the brief intervention being cost saving, and the probability that the intervention compared with control is cost-effective given threshold willingness-to-pay values of £20,000 and £30,000 is between 20% and 22%, respectively.

Among the 1500 replicates of incremental costs and QALYs, in 12% of observations the intervention was less costly and less effective, in 8% of observations the intervention was less costly and more effective, in 60% of observations the intervention was more costly and less effective, and in 20% of cases the intervention was more costly and more effective.

Corrections to *Table 27*

The final column of *Table 27* has been corrected to include the correct results for the incremental costs and cost per QALY gained.

| Category | Analysis | | |
| | Original | Sensitivity | |
		Extreme values	Missed school days
Incremental costs (£)	−2865 (−11,272 to 2707)	−2911 (−9900 to 4077)	79 (−104 to 260)
Incremental QALYs	−0.004 (−0.019 to 0.011)	−0.004 (−0.019 to 0.011)	−0.004 (−0.019 to 0.011)
Cost per QALY gained (£)	723,048	734,804	Intervention is dominated

Corrections to *Multiple imputation*

Second paragraph of this section on page 67 of the final report has been corrected to the following:

After multiple imputation, the conclusions that can be drawn from the results shown in *Table 28* do not differ markedly from those of the main analyses reported in *Table 26*, although in the imputed data set the incremental cost per QALY gained when missing school days were excluded doubles in magnitude to the value in *Table 27*. The CEAC and the incremental cost/incremental QALY plot (results not shown) were also similar to the plots from the main analyses and the missing school days sensitivity analyses reported above.

Corrections to *Table 28*

The results presented in *Table 28* of the cost–utility analyses using multiple imputation to account for missing data have been changed to reflect the values after excluding missed school days for the mean total cost (first column) for the control and intervention groups, the incremental cost of the intervention, and the cost per QALY gained as shown. A further explanatory footnote has also been added to the table.

| Option | Mean total | | Comparison | Incremental | | Cost per QALY gained (£) |
	Cost (£)	QALYs		Cost (£) (95% CI)	QALYs (95% CI)	
Including missed school days costs						
Control	9265	0.366	–	–	–	674,799[a]
Intervention	6513	0.362	Intervention vs. control	−2752 (−9879 to 4376)	−0.004 (−0.02 to 0.012)	
Excluding missed school days costs						
Control	748	0.367	–	–	–	–
Intervention	1000	0.363	Intervention vs. control	216 (−939 to 1372)	−0.004 (−0.02 to 0.012)	Dominated[b]

a As the control is more effective but more costly than the intervention, the ICER shows how much extra we have to pay to get one more QALY with the control compared with the intervention.
b As the intervention is on average more costly and less effective than the control, on average the intervention is dominated by the control.

Correction to *Cost–consequences analysis*

The text in the second column of *Table 29* has been replaced with the corrected probability estimate:

20% probability that the brief intervention is cost saving (results excluding costs from missed school days).

Corrections to *Discussion*

Second paragraph on page 70 of the final report has been corrected to the following:

The within-trial cost–utility analysis of the brief intervention suggested that there was approximately a 20% chance that the intervention would be cost saving overall when costs of missed school days are excluded. In other words, the cost of the intervention is likely to be offset by lower use of health services and other resources considered. The results were stable regardless of assumptions made about exclusion of high use of service and imputation of data, but were sensitive to the impact of missed school days. There was no evidence of a difference in QALYs and the CI may be sufficiently narrow to rule out the possibility of an important difference. Using conventional values for willingness to pay for QALY improvements (both £20,000 and £30,000), the intervention had a 73% probability of being cost-effective when including the cost of missing school days, and of 20% when excluding missed school days. The results of the cost–consequences analysis were presented in the form of a balance sheet, which showed that, despite the balance of probabilities being in favour of a cost-saving intervention, there was no evidence of a change in any of the other outcomes. This means that there is no clear evidence about the mechanism which might drive cost savings, except perhaps the long-term effects reflected in lower missed school days. This raises doubts as to whether any cost savings would be real or an artefact of imprecise cost data.

Corrections to *Appendix 16, Figure 9*

Figure 9 shows the distribution of incremental costs and incremental QALYs from 1500 bootstrap replicates stratified by trial group, geographic location and participant sex of the estimates from a seemingly unrelated regression of the difference between intervention and control group adjusting for baseline resource use costs, EQ-5D-3L score and participant characteristics. Twelve per cent (12%) of 1500 bootstrap replicates had lower costs and lower QALY, 8% had lower costs and higher QALYs, 60% had higher costs and lower QALYs, and 20% had higher costs and higher QALYs.
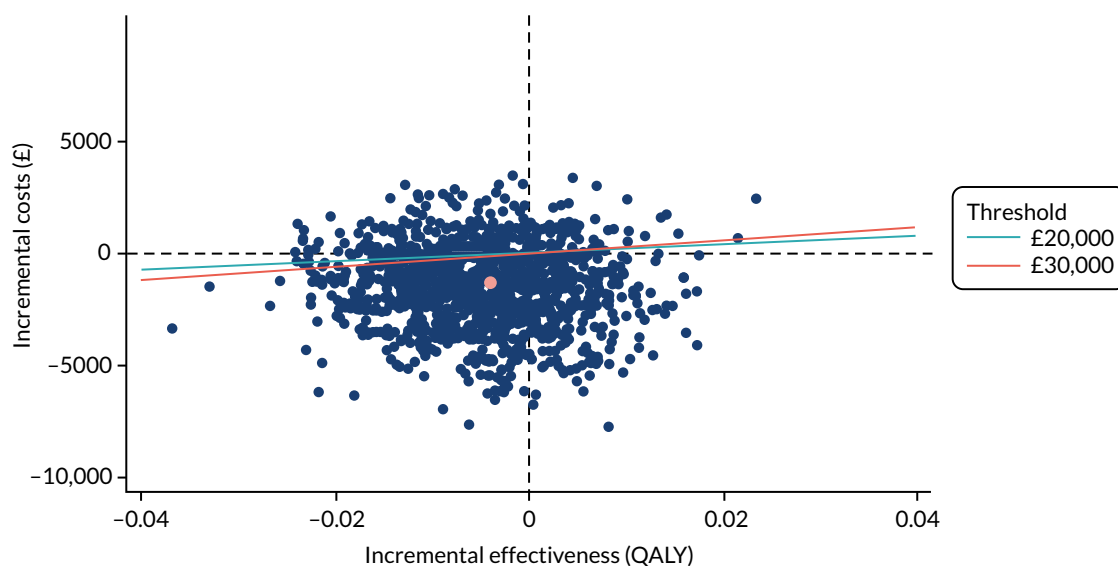
Reference

1.   Giles EL, McGeechan GJ, Coulton S, Deluca P, Drummond C, Howel D, *et al.* Brief alcohol intervention for risky drinking in young people aged 14–15 years in secondary schools: the SIPS JR-HIGH RCT. *Public Health Res* 2019;**7**(9).