

Place2Be's one-to-one counselling service in UK primary schools: an updated cost-benefit analysis

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Pro Bono Economics uses economics to empower the social sector and to increase wellbeing across the UK. We combine project work for individual charities and social enterprises with policy research that can drive systemic change. Working with 400 volunteer economists, we have supported over 500 charities since our inception in 2009.

Place2Be is a leading children's mental health charity with over 25 years' experience of working with pupils, families, and staff in UK schools. It believes no child should face mental health problems alone. Its vision is for all children and young people to have the support they need to build lifelong coping skills and to thrive.



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### **Executive Summary**

With mental health in our schools continuing to worsen, charities are playing a crucial role in supporting tens of thousands of children and young people experiencing difficulties. In doing so, these charities are providing vital, specialised services which improve lives, while setting children up for better longer-term wellbeing. These organisations are also helping to save the Exchequer money on welfare and health provision at a time when the NHS is stretched.

Since 2017, rates of probable mental disorders among primary school-aged children have increased from one in ten to one in six – or up to five children in every classroom. The pandemic and its resulting changes to day-to-day life have exacerbated the problem; 83% of young people report that the coronavirus pandemic has worsened their mental health. With two-thirds of children with a diagnosable mental health condition unable to access NHS care, many children do not have the support needed to manage their condition.

This has significant short and long-term implications for the children affected as well as for wider society. When children experience mental health difficulties, it can negatively impact their cognitive development and learning as well as their physical and social health.

There is a wealth of evidence linking the state of a child's mental health to outcomes in adolescence and adulthood. Mental ill health in childhood is linked to an increase in the likelihood of depression in adulthood. Other unfavourable outcomes - including lower employment and earnings, and a higher risk of committing crime, exclusion/truancy, and smoking - are also linked to lower mental health in childhood. In other words, poor mental health in childhood poses significant problems for society. It is therefore in the public interest to make early mental health support and interventions available to all children in need of it. Place2Be is a children's mental health charity that works with schools to support pupils, families and staff throughout the UK. It aims to deliver early intervention to give children the ability to cope with challenges, and to advise the people around children on how to support them. Their 'whole school' approach includes therapeutic counselling for pupils, working with parents and mental health training for school staff. In this report, we focus on their one-to-one counselling service for primary school children in the UK.

Our analysis suggests Place2Be's one-to-one counselling service has a positive impact on children's mental health. We have found that:

- Children receiving Place2Be's one-to-one counselling service experience an average 3.5 point reduction in their Strengths and Difficulties Questionnaire (SDQ) score. Of this, an average 2.1 point SDQ score reduction is likely to be attributable to Place2Be's programme.
- Place2Be's support could generate an average of £8,700 in economic benefits over the lifetime of the child.
- Given the programme costs on average £1,100 per child, we estimate it generates around £8 in benefits for every £1 spent.
- This high benefit-cost ratio was sustained despite the coronavirus pandemic.
- This means Place2Be's counselling service in the UK could generate as much as £36 million of lifetime benefits from each academic year of support.

This report finds that support in schools, such as the one-to-one counselling sessions offered by Place2Be, could play a vital role in tackling the children's mental health crisis in the UK. If a programme similar to Place2Be's was scaled up to operate across the country, it would likely have significant long-term economic benefits for children and wider society, in addition to the immediate increase in quality of life for the children themselves.

Across the country, policymakers have been taking steps to increase mental healthcare provision to children. The Welsh government pledged in 2020 to double funding to local authorities to ensure that all secondary school and Year 6 pupils have access to in-school counselling services. The Scottish government committed to ensuring that every secondary school has counselling services. Additionally, the UK government has pledged to deliver over 500 NHS Mental Health Support Teams (MHSTs) in schools in England by 2024. However, all these initiatives still leave gaps in primary school provision. We estimate that the intervention in England would only provide support for about 46% of state school pupils.

It is clear that further support will be required if we are to address the growing mental health crisis in our schools. We estimate that, if charity-provided one-to-one counselling were available at all schools in England that aren't planned to have an NHS Mental Health Support Team (MHST), then it could generate £751m of economic benefits for each year of support.

Charities, such as Place2Be, have a proven track record in delivering services that support children and young people with their mental health. Their experience and expertise should continue to play a vital role in the further roll-out of specialist support within schools. For every £1 spent, Place2Be's one-to-one counselling service generates economic benefits of around





On average, Place2Be's counselling service delivers economic benefits of



per child

Each year the service generates benefits of

£36 million If one-to-one counselling were offered in all schools in England without a Mental Health Support Team, it could generate

 $\mathbf{£75}$ 

of economic benefits for each year of support

### Introduction

Children's mental health is a growing concern in the UK. One in six children aged 6-to-10-year-olds are now believed to have a 'probable mental disorder'.<sup>1</sup> This is a considerable increase from one in ten in 2017. In other words, the average primary school classroom now has up to two more children with probable mental disorders than the average classroom in 2017.<sup>2</sup>

The coronavirus pandemic and its resulting changes to day-to-day life have exacerbated the problem. Primary school children have reported sadness and loneliness when discussing how the pandemic impacted them.<sup>3</sup> Feelings of loneliness, loss of motivation, increased anxiety about the virus and return to normalcy contributed to 83% of young people reporting that the coronavirus pandemic had worsened their mental health.<sup>4</sup>

As well as improving their lives today, evidence suggests that better mental health for children in their younger years benefits them in later years as well.<sup>5</sup> At a time when children's mental health is at crisis point, it is particularly important to consider interventions that could deliver these benefits.

It is estimated only one in three children with a diagnosable mental health condition access NHS mental healthcare, suggesting that the remaining two-thirds of children may not have the support needed to manage their condition.<sup>6</sup> UK government authorities have taken steps to increase mental healthcare provision for children. The Welsh government pledged in 2020 to double funding to local authorities to ensure that all secondary school and Year 6 pupils have access to in-school counselling services.<sup>7</sup> Similarly, the Scottish government committed to ensuring that every secondary

<sup>6</sup> Young Minds, <u>Mental Health Statistics UK</u>, 2022

<sup>&</sup>lt;sup>1</sup>NHS Digital, <u>Mental Health of Children and Young People in England 2021 - wave 2 follow up to the</u> <u>2017 survey</u>, 2021

<sup>&</sup>lt;sup>2</sup> Our estimates here and in the executive summary are based on an average primary school classroom size of 27 children, see ONS, <u>Schools, pupils and their characteristics</u>, <u>Academic Year 2020/21</u>, 2021 <sup>3</sup> Children's Mental Health Week, <u>Children's reflections on the pandemic</u>, 2022

<sup>&</sup>lt;sup>4</sup> Young Minds, <u>Coronavirus: Impact on young people with mental health needs</u>, 2020. Note that this is from a sample of young people aged 13-25, and therefore is not necessarily reflective of the primary school children participating in the focus intervention of this report.

<sup>&</sup>lt;sup>5</sup> G Paull & X Xu, <u>Study of Early Education and Development (SEED): The potential value for money of</u> <u>early education</u>, NatCen Social Research & Frontier Economics, 2017

<sup>&</sup>lt;sup>7</sup> Welsh Government, <u>Welsh Government doubles support for 'whole school' approach to mental</u> <u>health</u>, 2020

school has counselling services.<sup>8</sup> However, both initiatives still leave gaps in primary school provision.

To boost access to mental health services in England, the UK government pledged to deliver over 500 Mental Health Support Teams (MHSTs) in schools in England by 2024.<sup>9</sup> The UK government originally estimated their original pledge for 400 new MHSTs would increase the number of children with access to support to 3 million.<sup>10</sup> However, the Centre for Mental Health (CMH) and the Children and Young People's Mental Health Coalition (CYPMHC) state that this would only cover about one-third of state school pupils.<sup>11</sup> Further, CYPMHC says this planned provision was "not enough to meet the scale of need and no funding has yet been identified to support every area of the country having access".<sup>12</sup> This is exacerbated further by the fact that the MHSTs are planned to support children with "mild to moderate" conditions, so expert interventions for more severe conditions, such as counselling, are still needed even in the areas where MHSTs are operational.<sup>13</sup> Pro Bono Economics (PBE) now estimates that, taking into account the additional 100 MHSTs pledged by the UK government in Spring 2022, only 46% of children will have access to MHSTs.<sup>14</sup>

Children's mental health charities are playing a vital role: work alongside the government's MHST plans to increase access to mental health services for children who need support.

Place2Be is a children's mental health charity that supports primary and secondary school children across the UK. It aims to improve children's mental health by providing children and the people around them with tools and support to cope with challenges. For children in school, it provides group and one-to-one counselling, as well as offering advice to all under-18s who contact them with mental health concerns. In addition, the

<sup>9</sup> NHS England, <u>Mental health support in schools and colleges</u>, 2022

<sup>&</sup>lt;sup>8</sup> Scottish Government, <u>Delivering for today, investing for tomorrow: the Government's programme for</u> <u>Scotland 2018-2019</u>, 2018

<sup>&</sup>lt;sup>10</sup> Department of Health and Social Care, <u>£79 million to boost mental health support for children and</u> <u>young people</u>, 2021

 <sup>&</sup>lt;sup>11</sup> Centre for Mental Health, <u>Time for action</u>, 2021; see Annex F for our background analysis
<sup>12</sup> Children & Young People's Mental Health Coalition, <u>CYPMHC responds to the Health and Social Care</u> <u>Select Committee report on children and young people's mental health</u>, 2021

<sup>&</sup>lt;sup>13</sup> NHS England, <u>Mental health support in schools and colleges and faster access to NHS care</u>, 2021

<sup>&</sup>lt;sup>14</sup> Our approach is outlined in Annex F, and uses evidence from NHS England, *Mental health support in schools and colleges* 

charity provides mental health, safeguarding and other specialist training to school staff, and advice, support and resources to families.

### Scope of this report

This report summarises the findings of a cost-benefit analysis of Place2Be's one-to-one counselling service in primary schools. The aim is to understand whether the service provides value for money for the children involved and for wider society. This analysis serves as an update to our previous study of Place2Be's counselling service to incorporate newly-available evidence, and thus increase confidence in our findings.<sup>15</sup> Figure 1 outlines a logic model of Place2Be's one-to-one counselling service.

<sup>&</sup>lt;sup>15</sup> Pro Bono Economics, <u>Economic evaluation of Place2Be's Counselling Service in Primary Schools</u>, 2018

Figure 1. Logic model illustrating how Place2Be's one-to-one counselling leads to long-term economic benefits



A key update from the previous PBE report is that this report incorporates new evidence that compares the outcomes of Place2Be beneficiaries against a comparison group of similar children from the 2004 British Child and Adolescent Mental Health Survey (BCAMHS) sample.<sup>16</sup> In addition, we use data for an extended period covering a further five cohorts from 2016/2017 to 2020/2021, and updated economic values attributed to longterm outcomes associated with a change in childhood mental health.

By improving the strength of the assumptions underpinning the economic analysis of this service, we aim to improve the accuracy and certainty of the findings, which may in turn give Place2Be, its participating schools, funders and policymakers more confidence in the economic impact of the intervention.

Furthermore, we estimate the potential value added if Place2Be and other mental health organisations in the third sector filled the provision gap for children in England without access to MHSTs. We aim to answer the question: "If charities received investment to roll out services like Place2Be's one-to-one counselling to a representative proportion of primary school children without access to MHSTs in England, what would the net economic benefit be?"

<sup>&</sup>lt;sup>16</sup> K Finning, J White, K Toth et al., <u>'Longer-term effects of school-based counselling in UK primary'</u> <u>schools</u>', *European Child & Adolescent Psychiatry*, 2021

### Impact of children's mental health in the UK

Early intervention in children's mental health benefits children now and in later life, as well as wider society. Evidence suggests that better mental health in childhood benefits cognitive development, learning and physical and social health.<sup>17</sup> Poor mental health in childhood has been linked to an increased risk of being excluded from school, which is in turn linked to long-term mental health difficulties.<sup>18</sup> Furthermore, research suggests that poorer mental health in childhood carries higher costs to the individual, government and wider society due to the increased risk of depression, crime, smoking and loss of earnings and employment.<sup>19</sup> It follows that improving children's mental health is in the UK's best interest.

In looking at Place2Be's work to support children who are struggling, we find that their one-to-one counselling improves the average child's mental health significantly, and generates considerable economic benefits. We acknowledge that some of the benefits we have discussed here, namely the inherent value of improved childhood wellbeing and some linked factors experienced during childhood, are not fully captured in our economic analysis. This is because Place2Be capture mental health outcomes of their beneficiaries using the Strengths and Difficulties Questionnaire (SDQ), for which there is currently no recognised robust approach to economically value the benefits arising in childhood through changes in a child's quality of life. In absence of this evidence pathway, in our economic analysis we use longitudinal research presented in Paull and Xu (2017), which links a change in childhood SDQ scores to associated monetisable outcomes in adulthood. We recognise that this only captures part of the picture in presenting the real benefits produced by their service, and as such include a case study to highlight their impact.

<sup>&</sup>lt;sup>17</sup> Public Health England, <u>Promoting children and young people's mental health and wellbeing</u>, 2021

<sup>&</sup>lt;sup>18</sup> Centre for Mental Health, *Fact sheet: Children and young people's mental health*, 2021

<sup>&</sup>lt;sup>19</sup> Paull & Xu, Study of Early Education and Development (SEED): The potential value for money of early education

### Case study: Rafi, age 7, London

Rafi lost his dad to cancer when he was just 5 years old. A few years later, now age 7, he was still overwhelmed by grief. He carried a photograph of his dad with him at all times, and even wanted to keep it on his desk in class. He would often be completely inconsolable and in floods of tears in the classroom talking about how he missed him.

His sadness was so overwhelming that it began to affect the other children. His teachers despaired – they didn't know what to do to help him. Rafi's mum was also concerned that his sadness could impact on his learning and his ability to make friends.

Rafi began attending weekly sessions with Place2Be. During the sessions, he explored themes of life and death. He would draw pictures or play out scenes in the dolls' house, where a silent figure watched on from a distance. He would wonder as he drew about where people go when they die. He would play games with the counsellor where she could not reach him, and the rules were changed to stop her from being able to contact him. He would create two separate lands in the sand tray with the animal figures, where he explored concepts of heaven and earth.

Over the weeks, his counsellor was able to help him name his feelings and hold his pain, giving him time to process his grief. Rafi began to be able to recognise and name his own feelings of anger and disappointment. He also started to notice others and recognise how they may need help, and express hope for the future. At the end of his sessions, he told his counsellor "Even though you won't be with me anymore, you're always going to be my special friend."

Now Rafi smiles and waves at his Place2Be counsellor when he passes them in the corridor. He is a very popular, kind boy and is doing well in school.

# The original economic evaluation of Place2Be's one-to-one counselling service

For PBE's original economic evaluation of the one-to-one counselling service, Place2Be collected data on the mental health outcomes of the children they supported in 2015/16, both before and after each child's counselling programme. They used the Strengths and Difficulties Questionnaire (SDQ) to measure participants' mental health.

We then linked this evidence to research by Paull and Xu (2017)<sup>20</sup> that estimated the impact of changes in childhood SDQ on later outcomes, for which resulting economic benefits could be valued. These monetisable benefits include those associated with an increase in employment and earnings, and a decreased risk of smoking, depression, crime and truancy/exclusion.

PBE used this evidence pathway to estimate the gross benefit produced by Place2Be through their impact on children's mental health. By comparing these against the costs of running the sessions, we estimated that for every £1 spent, Place2Be's one-to-one counselling service generated £6.20 in long-term benefits for the child and wider society.

At the time of the first report, Place2Be had not yet collected long-term data on the mental health of the children they supported. This meant that there was some uncertainty around the persistence of Place2Be's impact on children's mental health, and doubt over the likelihood of realising the long-term benefits estimated. Secondly, no control or matched group was available to compare with the change in outcomes of the Place2Be cohort. There was therefore considerable uncertainty around how much of the change in mental health observed in the participants could be attributed to Place2Be's one-to-one counselling. In other words, it was unclear how much of the change in mental health occurred due to the intervention, and how much would have happened regardless of the counselling.

Due to evidence gaps on attribution and persistence, we produced a scenario analysis to estimate what the benefit-cost ratio would be if we assumed an attribution rate of 50%, in line with expertise from Place2Be's

<sup>&</sup>lt;sup>20</sup>Paull & Xu, Study of Early Education and Development (SEED): The potential value for money of early education

mental health advisers. However, we acknowledged that we had insufficient evidence available for a full cost-benefit analysis and the confidence that it offers on estimated value for money of the service.

However, Place2Be has since collected further information to evidence the persistence, attribution, and consistency of their impact. We use this newer evidence, along with an update to our valuation methodology, in this new cost-benefit analysis report

### Updates in this cost-benefit analysis report

Finning et al. (2021)<sup>21</sup> produced academic research on the long-term effectiveness of school-based counselling by focussing on Place2Be's 2015/16 cohort. In this study, researchers matched the Place2Be group and children with similar background characteristics from the British Child and Adolescent Mental Health Survey dataset. To allow for assessment of longterm impacts, Place2Be's 2015/16 cohort sample included pre-counselling, post-counselling and one-year follow-up data. By modelling the trajectories of SDQ scores for both groups, Finning et al. found a statistically significant long-term improvement in SDQ for the Place2Be group compared to that of the comparison BCAMHS group. This provides key evidence for the persistence and attribution of Place2Be's impact on children's mental health.

Furthermore, Place2Be collected pre- and post-counselling SDQ scores for children in their one-to-one counselling service for an additional five academic years up to 2020/21. This is valuable for two reasons: a) it allows us to analyse whether the impact of Place2Be's counselling remains consistent over the years, and: b) it allows us to check whether Place2Be still delivers value for money, including through the challenging pandemic period.

It is important to note that the economic analysis summarised in this report is based on the same main evidence used in the previous report i.e. the evidence pathway in Paull and Xu (2017), which links childhood SDQ change to monetisable later outcomes. This evidence pathway remains the most robust and recognised one to link a change in childhood SDQ to the likelihood of later monetisable outcomes. However, as the research is now

<sup>&</sup>lt;sup>21</sup> Finning, White, Toth et al., 'Longer-term effects of school-based counselling in UK primary schools'

five years old, PBE has updated the estimated values attached to those later outcomes. In particular, we have updated the monetary values attached to employment, earnings and smoking outcomes. See Annex B for a detailed methodology on our updated evaluation of later outcomes associated with a childhood SDQ change.

### Our approach

We link the Strengths and Difficulties Questionnaire (SDQ) data that Place2Be collects through to the service's value for money via the following six steps.

# Step 1: We estimate the average change in mental health in children who have gone through the counselling programme.

We focus on mental health for this report, as it is the most relevant outcome for Place2Be, and it is an outcome which has evidenced links to monetisable economic benefits. Place2Be collected data for participating children's mental health using the SDQ measure to understand the mental health difficulties faced by children at baseline (before counselling) and after counselling. We estimate the change in this to understand whether there is a significant change in mental health issues experienced by the participants.

# Step 2: We estimate the impact on mental health that is attributable to Place2Be.

Here we are trying to answer the question: "Of the change that we see in children's mental health, how much of that is down to Place2Be and would not have happened otherwise?" We do this by comparing the change in Place2Be 2015/16 participants' outcomes to those of a matched comparison group. Finning et al. (2021) compared actual and forecasted SDQ scores for Place2Be and a matched group from the British Children and Adolescent Mental Health Survey (BCAMHS) data.<sup>22</sup> By comparing the difference in long-term change in SDQ between the two groups, we estimate that 61% of the impact on SDQ seen in Place2Be data can be attributable to Place2Be's intervention.<sup>23</sup> We assume that this level of attribution applied to other years.

<sup>&</sup>lt;sup>22</sup> Finning, White, Toth et al., 'Longer-term effects of school-based counselling in UK primary schools'

<sup>&</sup>lt;sup>23</sup> This is higher than the initial estimate of 50% in our original economic evaluation report

Paull and Xu (2017) reported a link between a standard deviation change in SDQ outcomes in early years and later outcomes. The original PBE report on Place2Be's counselling service used this evidence to measure the long-term economic benefit of the counselling service on children's mental health. We updated this using new evidence on smoking costs, crime costs, employment-related benefits and tax, earnings and employment statistics, and inflation, to produce an up-to-date value associated with one standard deviation change in SDQ. Further details of these changes are available in Annex B.

# Step 4: Link the long-term value of outcomes associated with a childhood SDQ change evidence to the SDQ change data from Place2Be.

To calculate the monetisable benefits produced by Place2Be, we multiply the standard deviation SDQ change attributable to Place2Be by the value of long-term benefits associated with a 1 standard deviation SDQ. We see if the benefits per child and per cohort remain consistent over time, including the coronavirus pandemic-affected years.

### Step 5: Estimate the costs of the programme.

Place2Be collects data on the costs of its primary school work, based on the resources it uses and staff costs. In 2015/16, Place2Be recorded that 45% of the project managers' time working in primary schools was spent on the one-to-one counselling service. We assume that this proportion applies to other years as well for the purposes of this report.

# Step 6: Estimate the cost of delivery and assess the 'value for money' of Place2Be's one-to-one counselling service.

We compare the costs of delivery of the programme to the estimated longterm benefits estimated in Step 4. We assess the value for money of the programme to estimate the benefits produced for every £1 spent.

#### Key assumptions

- Our methodology uses evidence from Paull and Xu (2017) linking childhood changes in SDQ score to later monetisable outcomes. Part of this link involves an estimated change in probability of a later outcome associated with a change in childhood SDQ. We have assumed that the estimated probabilities in experiencing these outcomes are the same for the Place2Be group as for the average student studied in Paull and Xu. However, this may not be accurate as Place2Be's one-to-one counselling service is for children experiencing mental health difficulties, and Paull and Xu estimates are for the average child in England. In absence of evidence representative for the Place2Be group, we assume that the probability and value of later outcomes attributable to a change in SDQ are similar to Paull and Xu's estimates.
- We have made assumptions when updating Paull and Xu's estimated values of later outcomes associated with a change in SDQ. Notably, we have made assumptions on the present values of later life smoking, earnings and employment. See Annex B for more detail.
- We assume that the difference in SDQ changes for the matched BCAMHS comparison group and the 2015/16 Place2Be group over time is a good estimate of the attribution rate of one-to-one counselling participants' change in mental health to Place2Be. We assume that long-term attribution can be estimated by comparing average changes in both groups from baseline to 12-21 months (as most of the counselling sessions have finished in this period, and the average estimates remain statistically significant).
- In the absence of matched comparison groups for the other cohorts, we assume that the rate of attribution for the 2015/2016 group is the same for all other Place2Be cohorts. It is possible that the actual rate of attribution is different, so we check this using lower rates of attribution in our sensitivity analysis.
- We assume that the percentage of time spent by project managers on one-to one counselling work as a proportion of their work in

primary schools is indicative of the proportion of total cost spent on primary school work that is spent on the one-to-one counselling service. In reality, it is possible that the proportion of time spent may not exactly match the proportion of cost. Furthermore, in the absence of staff hours data from other years we assume that the 45% of all primary school work attributable to one-to-one counselling in 2015/2016 remains true for other years in our study.

 We assume that the individuals that Place2Be gather SDQ data for are representative of all the children that they have seen each year. While the sample on average accounts for the majority of the children seen, it is possible that those individuals that we do not have data for may have different characteristics and experiences that mean our estimates of benefits are not accurate.

These caveats add some uncertainty, and we are not currently able to minimise it further given the evidence available. However, we explore the robustness of our core results to variations in these assumptions as part of our sensitivity analysis.

Furthermore, we believe our estimates are conservative, because our analysis does not capture the inherent value of mental health improvements in the children's present quality of life, which are at this point not monetisable. Due to other evidence constraints, our analysis does not explicitly include the value of any short-term economic benefits associated with Place2Be's impact on mental health, such as increased confidence and better relationships. However, some of these effects may be captured in part in the monetisation of later outcomes associated with a SDQ improvement in childhood, as experiences and behaviours now impact the likelihood of outcomes later. Finally, there may be other longterm economic outcomes associated with mental health improvements in childhood (for example, better physical health) that are not captured in our analysis due to insufficient evidence.

### Results of our analysis

### Gross benefits

Using data over the past six years, we find that the average long-term gross benefits to society attributable to Place2Be's one-to-one counselling service is £8,700 per child. When we multiply this by the average number of children seen in an academic year, we estimate that this translates to about £36m per year in long-term benefits. This benefit is the sum of the present value of long-term monetisable benefits associated with an improvement in SDQ score, namely higher hourly wage and employment, and lower risks of depression, smoking, crime, and truancy/exclusion. Figure 2 illustrates the benefits arising from each of these impacts.





Total cohort benefits noticeably dipped in 2019/20. This is mainly because fewer children were seen in one-to-one counselling that year due to lockdown, with schools and Place2Be needing to adjust their approach to engaging with and supporting pupils. Notably, however, gross benefits per child stayed relatively consistent over the six years, as presented in Figure 3, despite the mental health and practical difficulties presented by the pandemic for the 2019/20 and 2020/21 cohorts.



# Figure 3. Gross benefits per child remain consistent with an average of $\pm 8,700$

#### Costs

The average cost per child over the past six years is around £1,100, or £4m per cohort. As presented in Figure 4, this has stayed level despite Covid restrictions.



### Figure 4. Costs per child average £1,100 since 2015/16

### Net benefits

After subtracting costs from benefits, we find that the average net benefit is £7,700 per child, or £32m per cohort. In other words, for every £1 spent, the counselling service produces around £8 in benefits through long-term outcomes that benefit the child, government and wider society. Figure 5 presents how the average net benefit per child remains stable over the last six years, and Figure 6 presents the gross benefits, costs and net benefits arising from the average participating child over the past six years.







Figure 6. Overall, the service's benefits outweigh its costs by  $\pm$ 7,700 per child

To understand the broader implications of Place2Be's value for money, we explore a thought experiment based on if all primary schools without a similar service in place received Place2Be's support. The UK government plans to deliver 500 MHSTs in schools in England by 2024. We estimate that this will only give access to 46% of children, leaving 2.5 million primary school children without access (see Annex F). Based on this assumption, we estimate that an investment of £92m to support charity sector solutions (like Place2Be's one-to-one counselling service) for all primary school children in England in greatest need could generate long-term economic benefits of £751m for each year of support.

### Sensitivity analysis

We carry out sensitivity analysis to challenge key assumptions in our methodology and see whether Place2Be's one-to-one counselling would continue to deliver value for money in different scenarios.

• Sensitivity test 1: What is the breakeven point attribution rate for Place2Be's counselling service?

We challenge our assumption that 61% of the change in mental health outcomes can be attributed to Place2Be. We calculate the lowest attribution rate at which the benefits of Place2Be's service outweigh the costs. We find that Place2Be delivers net benefits if it is responsible for at least 7% of estimated benefits arising from mental health improvements. However, we are confident that Place2Be's actual attribution rate is likely to be higher than this; the Finning et al. model's 95% confidence interval thresholds suggest that in a "worst case" scenario, Place2Be is still likely to be responsible for 27% of the improvement in outcomes.<sup>24</sup>

• Sensitivity test 2: What happens if we assume a lower impact attribution rate for all years other than 2015/16?

We challenge our assumption that the calculated attribution rate for the 2015/2016 cohort of 61% applies to other cohorts too. We apply an assumed 50% attribution rate, as per our original report assumption, to the other years. Even if we assume this lower level of attribution for other cohorts, the average cost benefit ratio for those years only is £6.70 in benefits for every £1 spent. This is still higher than the cost benefit ratio of £6.20 for every £1 spent as estimated in our previous report with Place2Be.

 Sensitivity test 3: What if we assume all Place2Be primary school work costs are due to the one-to-one counselling service? Here we challenge our assumption that 45% of all costs of Place2Be's work in primary schools is due to one-to-one counselling, based off staff hours data. We take the extreme assumption that 100% of the costs in primary schools is due to the counselling service and estimate the cost-benefit ratio. We find that, even if this unlikely scenario were the case, the one-to-one counselling service would continue to deliver value for money, with benefits of £3.67 for every £l spent.

<sup>&</sup>lt;sup>24</sup> Finning, White, Toth et al., 'Longer-term effects of school-based counselling in UK primary schools'. Using the Supplementary Information, Table S7, for the worst case scenario we assume that a) the comparator group's baseline SDQ score is the upper interval threshold, b) the comparator group's 12-21 month SDQ scores are the lower interval threshold, c) the Place2Be group's baseline SDQ score is the lower interval threshold, and d) the Place2Be group's 12-21 month SDQ scores are the upper interval threshold. We then follow a similar method to estimate our central attribution estimate; see Annex A.

# • Sensitivity test 4: What happens if we assume that other children outside of the sample see no benefits?

We challenge our assumption that the change in mental health (and resulting economic benefits) in the sample children represent the whole group of children that Place2Be see. In the worst-case scenario (if we assume maximum overlap in children assessed by teachers and parents), even if all other children in the sample see no benefits, then Place2Be still delivers a net benefit of £14.9m a year.

• Sensitivity test 5: What if we choose a more conservative estimate of the monetary benefits associated with a 1 standard deviation decrease in SDQ?

We make two key assumptions which affect the estimated economic benefits of the one-to-one counselling service: a) the children seen in this programme are representative of the average child in Paull and Xu's (2017) study, and b) we make certain assumptions when updating the economic benefit of the long-term outcomes associated with a 1 standard deviation in SDQ (see Annex for more details). It is possible that we have therefore overestimated the benefits generated. We test how much weaker the relationship between SDQ and economic benefits has to get for Place2Be children compared to those in Paull and Xu's study before Place2Be stops delivering value for money. We find that if a change in SDQ for the Place2Be children delivers long-term benefits even 88% lower than those expected for the children in the study, then Place2Be will still breakeven.

### Conclusion

Our analysis found positive value for money that exceeded what we originally found in our previous report. Through our cost-benefit analysis of Place2Be's one-to-one counselling service in primary schools, we found:

- Children receiving Place2Be's one-to-one counselling service experience an average 3.5 point reduction in their Strengths and Difficulties Questionnaire (SDQ) score. Of this, an average 2.1 point SDQ score reduction is likely to be attributable to Place2Be's programme.
- Place2Be's support generates an average of £8,700 in economic benefits over the lifetime of the child.
- Given the programme costs on average £1,100 per child, we estimate it generates around £8 in benefits for every £1 spent.
- This high benefit-cost ratio was sustained despite the coronavirus pandemic.

This means Place2Be's counselling service in the UK could generate as much as £36 million of lifetime benefits from each academic year of support. This report finds that the value for money of the service is greater than we originally estimated in our 2017 report.

At a time when the mental health of millions, including children, is being put under severe pressure, these results are noteworthy. Firstly, the average mental health improvement stayed the same during the pandemic years, compared to the non-pandemic years. This means that, like other years, during the pandemic the average child experienced a decrease in SDQ score of 2.9 points (when assessed by teachers) and 4.2 points (when assessed by parents).

The fact that Place2Be's one-to-one counselling sessions are robustly shown to have a positive impact on children's mental health and therefore produce long-term economic benefits, alongside quality of life improvements, suggests that Place2Be delivers excellent value for money. The programme's benefit-cost ratio remained high even during the pandemic period, which evidences the efficacy of Place2Be's work in challenging conditions. Finally, our findings not only identify Place2Be's value for money, but also evidence of the charity sector's crucial role in early mental health intervention. The UK government has pledged to deliver 500 Mental Health Support Teams in schools in England by 2024.<sup>25</sup> However, PBE now estimates that only 46% of children will have access to MHSTs.<sup>26</sup> It is clear that children's mental health charities, like Place2Be, will continue provide valuable support to children struggling with their mental health. We estimate that an investment of £92m to support charity sector solutions, like Place2Be's one-to-one counselling service, for a representative proportion of primary school children without access to MHSTs in England, could generate economic benefits of £751m from each year of provision.

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<sup>&</sup>lt;sup>25</sup> Department of Health and Social Care, £79 million to boost mental health support for children and young people

<sup>&</sup>lt;sup>26</sup> Our approach is outlined in Annex F, and uses evidence from NHS England, *Mental health support in schools and colleges* 

### Annex A – Measuring attribution of change in outcomes to Place2Be's one-to-one counselling service

In any intervention, some of the change in outcomes may have happened even without the intervention. In the case of Place2Be's counselling service, we see that, on average, children experience improved mental health as represented by an average reduction in SDQ score. However, some of this improvement may have happened anyway due to background factors not associated with Place2Be, e.g. a lifting of coronavirus restrictions or changes in a child's home life. To confidently attribute a proportion of the change in outcomes experienced by the beneficiaries, we compared their outcomes against a matched comparison group.

Finning et al. (2021) compared actual and model-predicted SDQ scores for the Place2Be and a matched comparison group from the 2004 British Child and Adolescent Mental Health Survey (BCAMHS) data.<sup>27</sup> After excluding all children from the BCAMHS sample who had been in contact with specialist mental health or education services, they included all children with recorded SDQ scores at baseline and at least one follow up period in the pool for matching with the Place2Be group.

We take the matched group in the Finning et al. paper to be the indicator of what would have happened if Place2Be children did not have access to the programme. In practice, we can see how much the long-term change in Place2Be SDQ scores is greater than that of the long-term change in the comparison group, and use this to estimate what proportion of the change in Place2Be's beneficiaries' outcomes are potentially due to their one-toone service.

Figure A1 is a recreation of Figure 2 in Finning et al., which compares mean SDQ scores of the Place2Be 2015/16 cohort to those of the BCAMHS matched comparison group.

<sup>&</sup>lt;sup>27</sup> Finning, White, Toth et al., 'Longer-term effects of school-based counselling in UK primary schools'



Figure A1. Comparing actual and model-predicted parent-reported SDQ scores of 2015/16 cohort to BCAMHS matched sample

Source: Finning, White, Toth et al., Longer-term effects of school-based counselling in UK primary schools

We find that the most consistent long-term difference in the two groups comes around 12-21 months since baseline. After this, the predicted difference starts increasing further and become statistically less accurate. As such, we only use the 12-21 months after baseline comparisons to estimate an attribution rate.

We calculate the average long-term change<sup>28</sup> in SDQ score for Place2Be over the average long-term change in CAMHS group, and then take that as a percentage of average long-term Place2Be SDQ change. We therefore estimate that 61% of the impact on SDQ seen in Place2Be data can be attributable to Place2Be's intervention.

It is important to note that this 61% estimated attribution rate is higher than the 50% rate initially estimated in our 2017 economic evaluation report for Place2Be's one-to-one counselling service. At the time of writing that report, we estimated an attribution rate based on feedback from Place2Be

<sup>&</sup>lt;sup>28</sup> "Long-term change" calculated by subtracting baseline mean SDQ scores to mean SDQ scores at 12, 15, 18 and 21 months post-baseline respectively. The resulting differences are then averaged to estimate the "average long-term change"

mental health specialist staff. This new evidence gives us confidence to apply a greater attribution rate in our analysis.

# Annex B – Updating monetary benefits associated with a change in SDQ

Paull and Xu (2017) estimate the economic benefits arising from a change in childhood SDQ score. Their approach is twofold:

- They establish a link between childhood development measures (including SDQ) at ages three and four with later life outcomes. They also use analysis of the National Pupil Database to link school achievements at age seven to later lifetime outcomes. Additionally, they estimate the probability of experiencing these later outcomes associated with a one standard deviation change in SDQ score at age 3.
- They draw upon a variety of evidence sources to monetise these later lifetime outcomes associated with a change in childhood SDQ score. This allows for monetary estimates of the value of future outcomes associated with a one standard deviation change in SDQ.

The relevant relationships to later outcomes from Paull and Xu (2017) are shown in Figure A2 below. These show the change in the probability of each outcome associated with a one standard deviation improvement in the SDQ score for children aged 4-11. We have kept these probability estimates the same in our report in absence of any newer evidence linking SDQ outcomes to later outcomes. Figure A2. Associations of a one standard deviation improvement in mental health (ages 4-11) on future outcomes

Outcome	Age	Associated change
Truancy	11-16	-2.2% probability
Exclusion	11-16	-0.2% probability
Crime	16-42	-1.6% probability
Smoking	16-60	-1.3% probability
Depression	16-60	-1.9% probability
Employment	16-60	+2.1% probability
Wages	16-60	+2.5%

We have updated the monetary values associated with a change in childhood SDQ score in light of newer evidence on the following:

- Values of outcomes
  - Employment using the ASHE data on median earnings from 2021, and the Universal Credit basic rate data from HMRC<sup>29 30</sup>
  - Wages using the ASHE data on median earnings from 2021, and the National Insurance and Income Tax rates from HMRC<sup>31</sup>
  - Smoking using the ASH Ready Reckoner data on costs of smoking<sup>32</sup>
  - o Crime using the Home Office Cost of Crime data<sup>33</sup>
- Inflation using the 2021 GDP deflator<sup>34</sup> to present costs and benefits in 2021 price levels

Figure A3 shows the monetary values for children of age 3 as originally reported in Table 7 of Paull and Xu (2017) for a one standard deviation reduction in SDQ score at age 3 and at age 7.<sup>35</sup> It also shows our updated

<sup>&</sup>lt;sup>29</sup> ONS, Earnings and hours worked, age group: ASHE Table 6, 2021

<sup>&</sup>lt;sup>30</sup> GOV.UK, <u>Universal Credit: How your earnings affect your payments</u>, 2022

<sup>&</sup>lt;sup>31</sup> GOV.UK, <u>Income Tax rates and Personal Allowances</u>, 2022

<sup>&</sup>lt;sup>32</sup> ASH, <u>ASH Ready Reckoner 2022</u>, 2022

<sup>&</sup>lt;sup>33</sup> Home Office, <u>The economic and social costs of crime Second edition</u>, 2018

<sup>&</sup>lt;sup>34</sup> ONS, <u>GDP deflators at market prices, and money GDP</u>, 2022

<sup>&</sup>lt;sup>35</sup> Note that a 1 standard deviation change in SDQ score at age 3 is associated with a 0.39 standard deviation change in SDQ score at age 7. Therefore, a 1 standard deviation change at age 7 is worth around 2.5 times more in present value at age 3 than a 1 standard deviation change at age 3. All columns are expressed in 2021 prices.

estimated benefit from a one standard deviation reduction in SDQ score at age at 3 and age 7 (in present value at age 3) after updating with newer evidence as discussed.

	Original SE estimate	ED report: d benefits	PBE update:	estimated benefits
Outcome	Age 3	Age 7	Age 3	Age 7
Reduced truancy - government (age 11-16)	£35	£90	£35	£90
Reduced exclusion - government (age 13-16)	£25	£64	£25	£64
Reduced smoking - private (age 16-60)	£282	£724	£159	£407
Reduced smoking - government (age 16-60)	-£104	-£266	-£47	-£120
Reduced smoking - society (age 16-60)	£123	£315	£178	£457
Reduced crime - government (age 16-60)	£44	£114	£58	£149
Reduced crime - society (age 16-60)	£13	£32	£75	£193
Reduced depression - government (age 16-60)	£217	£557	£217	£557
Higher employment - private (age 16-60)	£2,147	£5,506	£1,977	£5,068
Higher employment - government (age 16-60)	£1,383	£3,545	£1,207	£3,096
Higher wages - private (age 16-60)	£2,556	£6,553	£2,916	£7,477
Higher wages - government (age 16-60)	£1,004	£2,573	£874	£2,242
Total	£7,725	£19,808	£7,676	£19,681

Figure A3. Present value for a 3-year-old of a one standard deviation improvement in mental health at 3 or 7 via associated future outcomes

# Annex C – Calculating average change in mental health of children in Place2Be's one-to-one

### counselling service

Place2Be have collected data on the activities and outcomes of their oneto-one counselling service in primary schools. This includes the following data from the 2015/2016 cohort to the 2020/21 cohort:

- The number of children they see through their service
- The number of children they see by age
- The average SDQ score per cohort at the beginning of the counselling service, assessed by a teacher and/or parent
- The average SDQ score per cohort at the end of the counselling service assessed by a teacher and/or parent
- The average SDQ score at a one-year follow up period for the 2015/16 cohort assessed by a teacher and/or parent
- The costs of Place2Be's work in primary schools

For each child, a teacher and/or parent assesses their mental health by filling in the SDQ at the beginning of the one-to-one counselling and at the end of their counselling sessions.<sup>36</sup> To understand the impact (and later benefits) of Place2Be's one-to-one counselling service, we:

- Take the difference in average SDQ per cohort over the beginning and end of the counselling course
- Estimate the amount of that change in SDQ score that is attributable to Place2Be's intervention by applying the 61% attribution rate we estimated (Annex A)

<sup>&</sup>lt;sup>36</sup> Place2Be aim to gather the parent-completed SDQ and teacher-completed SDQ pre- and postcounselling for each child. In reality, for some children they have pre- and post- counselling data from both teacher and parent, for some they have pre- and post-counselling data from either the teacher or parent, and for others they have no data. Therefore some children will appear in both sets of samples. To estimate average change in SDQ score for any given child, we take the weighted mean SDQ change and impact based on the number of children in either sample to account for differences in perceived SDQ change between parents and teachers.

Figures A4 and A5 summarise the average reduction in teacher- and parent-assessed SDQ scores, the statistical significance of those reductions, and the reductions that are attributable to Place2Be's one-to-one counselling intervention.

	Number of children in	Mean baseline	Mean end of programme SDQ	Mean change in		Attributable mean
Year	sample	SDQ score	score	SDQ	t-statistic	change
2015/16	2179	15.2	12.2	3.0	19.4*	1.8
2016/17	2582	15.3	12.4	2.9	21.2*	1.7
2017/18	2359	14.8	11.7	3.0	21.7*	1.9
2018/19	2435	14.9	11.9	3.0	22.3*	1.8
2019/20	1159	14.5	11.6	2.9	14.7*	1.7
2020/21	2616	14.1	11.3	2.8	21.9*	1.7

#### Figure A4. Average change in teacher-assessed SDQ score by cohort

\* statistically significant change in SDQ score at 1% significance level

#### Figure A5. Average change in parent-assessed SDQ score by cohort

	Number of children in	Mean baseline	Mean end of programme SDQ	Mean change in		Attributable mean
Year	sample	SDQ score	score	SDQ	t-statistic	change
2015/16	1637	16.6	12.3	4.3	24.9*	2.6
2016/17	1910	17.0	12.8	4.2	27.6*	2.6
2017/18	1755	16.6	12.3	4.4	28.2*	2.7
2018/19	1774	16.5	12.7	3.8	24.8*	2.3
2019/20	966	16.8	12.5	4.4	22.0*	2.7
2020/21	2051	17.0	12.9	4.1	27.6*	2.5

\* statistically significant change in SDQ score at 1% significance level

# Annex D – Calculating average benefits from Place2Be's one-toone counselling service

To calculate average economic benefit for each participating child, we multiply the average standard deviation change in SDQ score of the participating children by the age-weighted monetary value associated with a 1 standard deviation change in SDQ score. This required the following steps:

# Step 1: Calculate the mean standard deviation impact change in SDQ score attributable to Place2Be.

To do this, we divide the attributable change in SDQ score by the SDQ standard deviations observed from a sample of 5-10 years olds in a study conducted by Meltzer et. al (2003).<sup>37</sup> While this study is older than the SEED report, the SEED report bases its standard deviation estimates on a sample of 3-year-olds. As the Place2Be sample consists of primary school children, we use the standard deviations from the Meltzer et al. paper as the age range in their sample matches closer to that of the Place2Be sample. Therefore, instead of using a standard deviation of 4.9 from the SEED Value for Money report, we use the standard deviation of 5.9 for the children assessed by teachers, and 5.7 for the children assessed by parents.

<sup>&</sup>lt;sup>37</sup> H Meltzer et al., <u>'Mental health of children and adolescents in Great Britain</u>', *International Review of Psychiatry* 15, 2003, pp. 185-187

Year	Mean change in SDQ	Mean standard deviation
		impact change in SDQ
2015/16	1.82	0.31
2016/17	1.74	0.29
2017/18	1.85	0.31
2018/19	1.84	0.31
2019/20	1.75	0.30
2020/21	1.72	0.29
Average	1.79	0.30

## Figure A6. Mean standard deviation impact change in SDQ, children who are teacher-assessed

Note: changes presented in this table are what we have attributed to the one-to-one programme

Figure A7. Mean standard deviation impact change in SDQ, children who are parent-assessed

Year	Mean change in SDQ	Mean standard deviation
		impact change in SDQ
2015/16	2.61	0.46
2016/17	2.57	0.45
2017/18	2.67	0.47
2018/19	2.31	0.40
2019/20	2.66	0.47
2020/21	2.49	0.44
Average	2.54	0.45

Note: changes presented in this table are what we have attributed to the one-to-one programme

By pooling the teacher- and parent-assessed groups together, we can estimate the mean attributable change in SDQ and the mean standard deviation impact change in SDQ for the average child in any cohort (presented in Figure A8). We do this by:

- Calculating the weighted mean change in SDQ (attributable to the programme) based on the number of teacher- and parent-assessed children in the sample
- Calculating the weighted mean standard deviation impact change in SDQ (attributable to the programme) based on the number of teacher- and parent-assessed children in the sample

Year	Combined	Attributable	Attributable mean
	number of	mean change	standard deviation
	children in	in SDQ	impact change in SDQ
	sample		
2015/16	3816	2.16	0.37
2016/17	4492	2.09	0.36
2017/18	4114	2.20	0.38
2018/19	4209	2.03	0.35
2019/20	2125	2.16	0.37
2020/21	4667	2.06	0.36
Average	3904	2.11	0.36

Figure A8. Mean standard deviation impact change in SDQ per year

Note: changes presented in this table are what we have attributed to the one-to-one programme

Therefore, we estimate that the average child experiences a reduction in SDQ score of 3.5, of which 2.1 points are attributable to Place2Be's one-toone counselling service.

# Step 2: Calculate the age-adjusted monetary benefits associated with a 1 standard deviation change in SDQ

We find the mean age-adjusted present value of monetary benefits per child associated with a 1 standard deviation change in SDQ. Benefits from older children will be received sooner, e.g. a 10-year-old is 7 years closer, on average, to starting employment than a 3-year-old. As people prefer benefits sooner than later, we follow Green Book guidance and apply a 3.5% discount rate. Therefore, we need to apply this discount rate to estimate the present value of the benefits arising from a 1 standard deviation change in SDQ established in Annex B for the older age groups in the Place2Be sample. As children in Place2be are different ages, we discount their benefits according to the ages as shown below in Figure A9.

Age of	Discount factor from age	Benefits from a 1 standard
child	3	deviation decrease in SDQ
Age 3	1.00	£19,681
Age 4	1.04	£20,370
Age 5	1.07	£21,083
Age 6	1.11	£21,821
Age 7	1.15	£22,584
Age 8	1.19	£23,375
Age 9	1.23	£24,193
Age 10	1.27	£25,040
Age 11	1.32	£25,916

Figure A9. Age-adjusted present value benefits of 1 standard deviation change in SDQ  $^{\rm 38}$ 

### Step 3: Calculate the age-weighted economic value associated with a 1 standard deviation change in SDQ for the average child in each cohort

We then weight the age-adjusted present values of a 1 standard deviation change in SDQ by the number of children of each age to estimate the ageweighted mean savings of a 1 standard deviation change in SDQ for each cohort in the Place2Be sample.

<sup>&</sup>lt;sup>38</sup> Original benefit values from Paull & Xu were discounted to age 3 so discount factors applied are greater than one for all age groups older than 3.

Figure A10. Age-we	Figure A10. Age-weighted present value benefits of a 1 standard deviation change in SDQ for the average child in each					
cohort						
Children by age	Age-adjusted			Number of children		

ermaren by age	Age adjusted					Number	orennaren
	benefit	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Age 4	£20,370	ור	8	3	0	4	4
Age 5	£21,083	174	124	103	115	57	122
Age 6	£21,821	446	334	291	253	122	256
Age 7	£22,584	554	407	405	369	176	432
Age 8	£23,375	756	539	474	414	252	581
Age 9	£24,193	796	607	554	515	281	609
Age 10	£25,040	786	607	560	553	532	664
Age 11	£25,916	517	448	472	601	476	564
Weighted	-	£23,798	£23,862	£23,922	£24,056	£24,350	£23,995
average							

### Step 4: Estimate the mean benefits per child in each cohort

We multiply the age-weighted economic value associated with a change in 1 standard deviation change in SDQ with the mean standard deviation change in SDQ we see for the Place2Be beneficiaries. This results in the estimated monetary lifetime benefits generated per child per cohort as a result of Place2Be's one-to-one counselling service. Figure All presents these estimates by cohort.

	•			
Year	Attributable	Mean benefits	Number of	Total benefits
	mean standard	per child	children in	per cohort
	deviation		cohort	
	impact change			
	in SDQ			
2015/16	0.37	£8,876	4548	£40,368,616
2016/17	0.36	£8,622	4498	£38,779,696
2017/18	0.38	£9,079	4193	£38,069,442
2018/19	0.35	£8,434	4076	£34,376,953
2019/20	0.37	£9,088	3609	£32,797,517
2020/21	0.36	£8,528	4142	£35,321,605
Average	0.36	£8,733	4178	£36,484,821

Figure All. Estimated monetary benefits generated by Place2Be's one-toone service

We find that in an average cohort of 4,178 each year (including those not in the sample due to missing pre-and post-counselling SDQ data), Place2Be generates benefits of £36 million per year, or £8,700 per child over their lifetime.

## Annex E – Calculating costs of Place2Be's one-to-one counselling service

We use Place2Be's cost data to estimate costs per year and per child of the one-to-one counselling service in primary schools. The charity collect the following data:

- Total costs per year of their work in primary schools
- Total number of children in their one-to-one counselling service

As Place2Be provides a range of services in primary schools in addition to the one-to-one counselling service, it was necessary to estimate the proportion of the overall cost that could be associated with the delivery of the counselling service using a pro-rata apportionment of the total cost of providing all services in primary schools that is based on the time spent on the service by Place2Be's School Project Managers. This method allocates a blend of fixed and recurrent costs to the counselling service.

Place2Be told us that School Project Managers spent on average 45% of their time on the counselling service in 2016/17. This includes undertaking referrals and assessments, direct contact time and clinical supervision. The other 55% of their time is used on a range of other activities involved in delivering a 'whole school approach', such as group work, whole class work, the self-referral service, consultation and support for school staff, parent partnership work and multi-agency meetings.

Using this information we take the following steps to estimate the average costs of the Place2Be one-to-one counselling service:

### Step 1: Express all cost data from Place2Be in real terms

We use the GDP deflator to express all costs in 2021 price levels.

### Step 2: Estimate the total cost of the one-to-one service each year

We estimate that 45% of the total cost to Place2Be of their work in schools derives from their one-to-one counselling programme. In absence of newer staff data since 2016/17, we assume this proportion of time spent in primary

schools for one-to-one counselling has remained constant across all cohorts.

# Step 3: Estimate the average cost of the one-to-one service over a year

We average the estimated total costs of the one-to-one service across all academic years to estimate how much the programme costs Place2Be in an average year. We find that on average the programme costs £4.5 million each year, for an average cohort size of 4178 primary school children.

### Step 4: Estimate the average cost per child

To estimate the average cost per child over all years in our sample, we divide the average yearly cost of the Place2Be programme by the average number of children in a cohort. We find that, on average, the programme costs Place2Be £1,100 per child.

# Annex F – Calculating broader implications

The UK government has pledged to deliver over 500 Mental Health Support Teams in schools by 2024. However, evidence suggests that some children will still be left without access. To understand the broader implications of Place2Be's value for money in solving this problem, we used a thought experiment that calculated the potential benefits of providing a similar service to all children in England without access.<sup>39</sup> This included the following stages:

# Step 1: Estimate the number of children in England who will not have access to MHSTs.

According to NHS England, there are currently 287 MHSTs set up and operating.<sup>40</sup> It estimates that 26% of England's pupils and learners in Further Education are covered by these MHSTs. A further 112 have been commissioned and began training in 2021/22, and another 104 are planned to begin training in 2022/23. Therefore, a total of 503 MHSTs are planned to be operational by 2024. This is a 75% increase on the number of currently operational MHSTs.

We assume that percentage of children covered will increase proportionately to the increase in MHSTs. By applying a 75% increase to the estimated 26% of pupils and learners currently covered, we estimate that 46% of pupils and learners in England will have access to MHSTs once all planned are in operation by 2024.

We then apply this to ONS data on the number of primary school pupils in England to estimate the number of children with access to planned MHSTs. We then estimate that, out of the 4.7 million primary school children in England, there will be approximately 2.1 million children with access to MHSTs and 2.5 million children without access to MHSTs.

<sup>&</sup>lt;sup>39</sup> This assumes that a similar proportion of children would be seen in these schools as Place2Be currently supports in their partner schools.

<sup>&</sup>lt;sup>40</sup> NHS England, Mental health support in schools and colleges

Step 2: Estimate the percentage of children in Place2Be's one-to-one counselling service as a proportion of the total school population of their partner schools

Place2Be deliver a whole-school approach to mental health, and one-toone counselling services are just one aspect of their work in primary schools for children who are struggling. 4,142 children participated in their one-to-one counselling in 2020/21, which is 3.39% of the total partner primary school population of 122,207. Therefore, we assume that 3.39% of children in England would be seen if counselling were made available to all children without MHSTs.

### Step 3: Estimate the number of children in England without MHST access, assuming a similar proportion of children might benefit from charity

We apply the 3.39% proportion of children seen by Place2Be to the estimated 2.5 million children in England without access to MHSTs. We therefore calculate that approximately 86,000 children in England without access to MHSTs may benefit from one-to-one counselling from organisations like Place2Be.

Step 4: Estimate the potential benefits and costs generated if the estimated representative number of children without MHST access had access to Place2Be one-to-one counselling or similar.

We apply our average per-child estimates in economic benefits (£8,700) and costs (£1,100) generated by Place2Be's one-to-one counselling service to our estimated 86,000 children in need of special support and without access to MHSTs. We therefore estimate that, if £92m were invested to support charity sector solutions like Place2Be's one-to-one counselling service for these children, the economic benefit generated could be £751m each year.

### Key assumptions

We have made several significant assumptions in our calculating the broader implications impact:

### • Number of pupils

We assume that, once all planned MHSTs are up and running, the number of primary school pupils remain the same as in 2020/21. We also assume that MHSTs will only be available in state-funding primary schools, and hence use ONS numbers on primary school pupils in those schools only.

#### • Number of MHSTs

In line with NHS England, we assume that no further MHSTs will be built beyond the total 503 planned by 2024. We also assume that all 503 planned will be in operation.

### • Coverage of MHSTs

We make a few important assumptions on who has access to the total planned MHSTs.

- We assume that the NHS England number of operational MHSTs and estimated coverage holds true, i.e. that "as of Spring 2022, 287 teams are now operational covering over 4,700 schools and colleges and 26% of pupils in schools and learners in Further Education".
- We assume that the additional planned number of MHSTs will cover a proportionate number of children.
- We assume that the "26% of pupils in schools and learners of Further Education" estimate refers to children and young people with access based on geographic reach, rather than mental health need.
- We assume that the estimated coverage of MHSTs, both current (26%) and predicted (46%, by our calculations) apply equally to primary and secondary schools.

### • Substitutability of MHSTs and one-to-one counselling

We assume that MHSTs and one-to-one counselling are similarly effective in reducing mental health difficulties and used by similar groups of children. However, we believe that this is a conservative assumption, as MHSTs are designed to support children with mild to moderate conditions. Therefore, it is likely that more intensive interventions, such as one-to-one counselling provided by Place2Be, may still be needed in places where MHSTs are operational.

• The representative number of primary school children in the UK Only a proportion of Place2Be's total partner school population participate in one-to-one counselling. Therefore, we assume that a similar proportion of children in England would be seen if counselling were made available to all children without MHSTs. We estimate that 3.39% of the total population of Place2Be's partner schools are seen through their one-to-one counselling service. In reality, the actual number of children seen might vary according to children's need for counselling and supply of counsellors.

#### Benefits and costs per child

We assume that one-to-one counselling costs of provision remain the same per child as in our Place2Be estimates. However, in practice they may differ as different providers may face different operational costs to Place2Be, and the cost per child may go down if there are potential economies of scale. We also assume that the long-term benefits associated with charity sector solutions similar to Place2Be's one-to-one counselling would be consistent with our per child estimates for Place2Be. However, it is possible that similar solutions may yield different changes in average mental health of beneficiaries, and therefore different levels of monetary benefit.







