



# The Economic Benefits of Ecominds

## A case study approach

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# 1. Introduction and research

## The Ecominds scheme

**Ecominds has funded 130 environmental projects in England since 2009 - helping over 12,000 people to look after their mental health.**

Thanks to support from the Big Lottery Fund since 2009, Mind's Ecominds scheme has funded 130 environmental projects in England that help people living with mental health problems get involved in green activities to improve their confidence, self-esteem, physical and mental health.

Projects range from horticultural and agricultural schemes, through to walking groups and regeneration projects in local parks. They all encourage those attending to enjoy and benefit from nature and green spaces.

Over 12,000 people have used Ecominds to help them look after their mental health. The scheme is now coming to an end and will finish in autumn 2013.

## Objectives of the research

**This research investigates and evidences the economic implications of five Ecominds projects.**

The objectives of this research are to investigate and evidence the economic implications of five Ecominds projects using a case study approach.

Helping people with mental health problems to get involved in green activities has a number of impacts and benefits. These range from increased well-being experienced by beneficiaries to cashable state savings through avoided costs accruing to the public sector and taxpayers. Indeed, direct financial costs of mental illness prevalence in the UK have been estimated to be £41.8 billion per annum while the broader indirect economic losses could represent as much as £77 billion per annum. Equally, it has been estimated that 13.8% of the NHS budget is spent on addressing the nation's mental health<sup>1</sup>.

Creating effective schemes that can treat and prevent mental health problems in innovative ways can therefore generate substantial savings and create broader positive financial and economic outcomes along with social and well-being ones. Ecominds is not necessarily designed to replace more traditional mental health treatments (e.g. medication) but rather to complement these with ecotherapy schemes.

Whilst acknowledging that the primary objective of Ecominds is to enhance people's confidence, self-esteem, overall well-being and resilience, this research focuses on providing an estimation of the economic benefits only. This is done by analysing five individual case studies that illustrate a change in mental health and by quantifying the potential cashable benefits generated by improving the mental health of these five beneficiaries, using a range of assumptions.

For privacy reasons this report refers to some case study subjects using names that are not their own.

## 2. Growing Well and Joanne

**Growing Well is a certified organic farm based just south of Kendal**

**Joanne's story creates over £12k of potential economic benefits in one year.**

Joanne was in her early twenties when she was referred to Growing Well's Ecominds project in 2010. She was overweight and unfit, rurally isolated and inactive. She slept during the day and spent the night times in her room playing on the computer. She was being treated by the Early Intervention in Psychosis team with weekly appointments from her Community Psychiatric Nurse, having recently been discharged from a lengthy stay in hospital. She had become unwell in another part of the country and had moved to the area to be cared for by her family and had no friends in this area. She had become unwell in her late teens and had never held a job.

She began to participate in Growing Well's farm-based activities for one day a week. She started to work in small teams with other participants, building up her confidence to work collaboratively and to socialise with people. As she learned the horticultural tasks she found that she really enjoyed growing plants and working in a farming environment. In her monthly one-to-one meetings with the Growing Well staff she began to think about the future for the first time, and expressed an interest in being involved with the project more often. Over the course of a year she built up her stamina and capacity such that she was involved in activities four days a week.

She learned to drive a tractor, passing her Level 2 tractor driving qualification, and chose to enrol on the Level 1 certificate in horticulture, which she attained. Having never been employed before, she aspired to find work and, in particular, to enter farming as a career. Her health significantly improved. She lost weight, becoming fitter than she had ever been, and she was discharged from mental health services.

Growing Well staff began to signpost her to jobs in the local area and to educational opportunities. She undertook some temporary paid-work with Growing Well as a horticultural assistant, working independently from staff. Growing Well staff identified a horticultural apprentice opportunity that was on offer. They supported Joanne to complete her CV and take part in interview practice sessions. They spoke to the organisation offering the apprenticeships to identify the skills Joanne would require on application and then coached her to support this skill acquisition.

Joanne applied for the apprenticeship and was taken onto the programme. Because she was a new entrant to farming she was required to gain more commercial experience. Growing Well supported her to identify a work-placement and to solve the transport issues required to attend. Two years after beginning her placement with Growing Well she began her apprenticeship and a year later has moved house, is in paid employment and has passed her driving test.

Joanne has now fully recovered from the mental health episode which initially led to her hospitalisation and is no longer receiving support from mental health services or financial support from Jobcentre Plus.

## Outcomes

We consider that the potential benefits and avoided costs of the intervention to the State and broader public sector are the following:

- Avoided prescription costs
- Avoided medical consultation costs
- Avoided use of community psychiatric nurse services
- Avoided benefits payments as a consequence of moving into employment
- Avoided Disability Living Allowance costs
- Increased tax receipt to the Exchequer as a consequence of moving into employment
- Increased National Insurance contributions as a consequence of moving into employment

## Economic benefits

### Avoided prescription costs

Drawing on figures published by The London School of Economics (LSE) Mental Health Policy Group, we have estimated that for the total number of people with mental health issues accessing health services (4.64 million British adults per annum)<sup>2</sup> the total NHS costs of medication prescriptions and therapies are of £1.2 billion per annum<sup>3</sup>. This is equivalent to **£258.27** per person using these services per year. Although this figure is an average estimation, this study is the most robust estimate that has been produced so far. It avoids an assumption about the specific services the beneficiary would have accessed in the absence of the intervention, and the unit costs of these services. It is also likely to be a conservative estimate, given that the beneficiary in question might have used above average medication prescriptions and therapies (e.g. inpatient rather than outpatient therapies)<sup>4</sup>. However, in the absence of more robust information it is sensible to use a conservative estimate in order to avoid over-claiming.

### Avoided medical consultation costs

The LSE Mental Health Policy Group has also estimated that for the total number of people with mental health problems accessing health services (4.64 million British adults per annum), the total NHS costs of various forms of consultation (predominantly primary healthcare access) is of £1.9 billion per year<sup>5</sup>. This is equivalent to **£408.92** per person accessing services per year. The rationale for selecting this figure is the same as for avoided medication costs.

### Avoided use of community psychiatric nurse services

Joanne was being supported by a community psychiatric nurse (CPN). It is likely that she would have continued using the CPN had the intervention not taken place. The Personal Social Sciences Research Unit (PSSRU) report, collating unit costs of health services, estimates that the cost to the NHS of CPN services is £67 per hour<sup>6</sup>. We assume that the CPN would have visited Joanne twice per week, for an hour each time. This is synonymous of a total cost of **£6,968** per year. We make the conservative assumption that, given Joanne's condition, she would have used this service for at least one more year.

### Avoided benefits payments as a consequence of moving into employment

The beneficiary in question managed to gain employment as a consequence of Ecomind's support. This generates savings to the State by avoiding Jobseeker's Allowance payments. Joanne is in her early twenties and benefits for persons below 25 years old are of a minimum of £56.80 per week, or **£2,953.60** per annum<sup>7</sup>.

### Avoided Disability Living Allowance costs

Moving into employment also induces avoided Disability Living Allowance costs, which is a second saving to the State. Minimum Disability Living Allowance is of £21 per week, i.e. **£1,092** per year<sup>8</sup>. This is a conservative figure given that it is the strict minimum that can be paid.

### Increased tax receipt to the Exchequer as a consequence of moving into employment

Moving into employment implies an additional tax contribution to the Exchequer. We assume that Joanne earns the legal minimum wage – which is a conservative assumption. Hourly minimum wage in the UK for 2013 is £6.31 per hour. Assuming 37.5 working hours per week, this is equivalent to an income of £12,304.50 per year. For a gross income of £12,304.50 the tax intake is estimated at **£572.90** per annum<sup>9</sup>.

### National Insurance contributions as a consequence of moving into employment

Finally, moving into employment leads to National Insurance (NI) contributions. For a gross income of £12,304.50 (as calculated above) the NI contribution is estimated to be of **£545.94** per annum<sup>10</sup>. This is also a cashable benefit accruing the State.

## Summary

Table 1 (see page 8) presents a summary of the economic benefits from the improvements that Joanne has experienced. The cashable benefits are twofold: direct avoided costs to the NHS, estimated to be of a total of **£7,635.19** per annum and indirect avoided costs and benefits generated to the Exchequer, estimated to be **£5,164.44**. The total cashable economic benefits are estimated to be **£12,799.63** on a per year basis.

Due to a lack of evidence of economic benefits in the long term, we estimate that these benefits are generated for one year only. We consider this is under-claiming the benefits generated since, for example, the employment benefits can be considered to be ongoing across a number of years. Nonetheless, we do not have robust evidence about the duration of the benefits and it is difficult to tell whether Joanne would have found employment as a result of improvements from accessing NHS services. We thus consider that, in this context, it is prudent to under-estimate rather than bear the risk of over-claiming.

Table 1: Summary of annual economic benefits from Joanne and Growing Well

| Benefits                                  | Value (£)        |
|---|------------------|
| Avoided prescription costs                | 258.27           |
| Avoided medical consultation costs        | 408.92           |
| Avoided community psychiatric nurse costs | 6,968.00         |
| Avoided Jobseeker's Allowance             | 2,953.60         |
| Avoided Disability Living Allowance       | 1,092.00         |
| Increased tax contribution                | 572.90           |
| Increased NI contribution                 | 545.94           |
| <b>TOTAL</b>                              | <b>12,799.63</b> |



## 3. Green Gym and John

### Overview

The Conservation Volunteers Green Gym is a national scheme which inspires people to improve both their health and the environment at the same time.

John's story creates over £7k of potential economic benefits in one year.

John explains his experience of Green Gym in the following interview.

*How did you find out about The Conservation Volunteers (TCV) and the Green Gym?*

I was carrying out work with the Sandwell volunteer centre and they had been contacted by TCV to see if anybody was interested in helping the local area and learn new skills. I have always loved the outdoors and this was an ideal opportunity to get hands on experience.

*Before joining the Green Gym had you volunteered with TCV or another organisation before?*

I had only volunteered at the local allotment; so to work on a much larger project was the next step up.

*Describe your life and situation when you joined the group.*

I have suffered from mental health and alcohol related issues for a number of years.

These issues bought me to a very low point in my life and I had begun to take a very dark outlook towards my future. I was seeing various therapists and came to join the group as a last resort to try and get my life on track.

*How did you find volunteering with the Green Gym? How did it benefit your health and wellbeing?*

At first I was very shy and found it hard to interact with some of the other volunteers. It's strange when everybody in the same group is suffering from various mental health issues and, although you are aware what they are going through, you find it hard to relate. I started to talk with the project leader as regards some of the treatment I was under and from there we began to explore jobs that I enjoyed and from which I gained a sense of satisfaction. After some time I noticed that others in the group had issues and began to help them by talking about mine and what I wanted from the volunteering. It became a great help to me when I was able to assist others to understand their emotions and it made me view mine in a very open manner.

*What kind of conservation work have you been doing?*

I don't think there is anything I have not carried out as our project leader is a hard task master. He has a passion for wildlife so it has been great to learn about land and habitat management. From felling trees to hedge laying and dry stone walling we have covered a great range of skills.

*Describe your life and situation now:*

My life has changed and I would like to think it has been for the best. I now have friends who will not judge me and consider I am weak if I cry or have a relapse. I have never claimed to be strong but I have found a purpose to my life where I can help others understand and deal with their issues. I have become more fun and I can pass this on to others by lifting their emotions and helping to give direction to their work.

Whilst I am happy to have the occasional pint with friends, I no longer need alcohol to deal with my problems and this has made me more attentive to detail.

*Has it changed your attitude towards your environment? E.g. Do you recycle more? Has your diet changed? etc.*

My diet has changed in a great way. I have diabetes and with alcohol was beginning to suffer very much. I am now strictly a diet coke drinker and while I still love my sausage rolls I have been known to have the occasional piece of fruit as well.

Looking back at the work I've carried out I can see the changes I've made and know that I can shape my future and that of the planet.

*Do you feel you have more control over your life? If so, in what ways:*

I'm not sure about control because I have such a busy life so the pace of my social diary tends to dictate more and more. Having said that though with more dates in my diary it does mean that I have become more organised and have a direction that I want to follow.

*Has your quality of life improved since starting on the Green Gym? If so, how:*

My quality of life has become more important to me and I have found that the changes have to come from me and no one else. I view improvement as an on-going task and when I complete one stage I'm beginning to find something else I can improve on.

## Outcomes

We consider that the potential benefits and avoided costs to the State and broader public sectors are the following:

- Avoided prescription costs
- Avoided medical consultation costs
- Avoided costs of diabetes complications
- Avoided use of alcohol outpatient treatment

## Economic benefits

### Avoided prescription costs

The LSE Mental Health Policy Group has estimated that for the total number of people with mental health problems accessing health services (4.64 million British adults per annum), the total NHS costs of medication prescriptions and therapies are of £1.2 billion per annum<sup>11</sup>. This is equivalent to **£258.27** per person using these services per year. Although this figure is an average estimation, this study is the most robust estimate that has been produced so far. It avoids an assumption about specific services John would have accessed in the absence of the intervention, and the unit costs of these services. It is also likely to be a conservative estimate, given that John might have used above average medication prescriptions and therapies (e.g. inpatient rather than outpatient therapies)<sup>12</sup>. However, in the absence of more robust information it is sensible to use a conservative estimate in order to avoid over-claiming.

### Avoided medical consultation costs

The LSE Mental Health Policy Group has also estimated that for the total number of people with mental health problems accessing health services in one year (4.64 million British adults), the total NHS costs of various forms of consultation (predominantly primary healthcare access) is £1.9 billion per year<sup>13</sup>.

This is equivalent to **£408.92** per person accessing services per year. The rationale for selecting this figure is the same as for avoided prescription costs.

### Avoided costs of diabetes complications

A combination of diabetes and alcohol intake can lead to severe pathological complications. A report from the LSE has estimated that prescribing medication for diabetes complication is around four times higher than for treating mild diabetes condition. Diabetes complications require inpatient care costing the NHS £1,800 to £2,500 per patient per annum, whereas annual outpatient costs (without complications) are estimated to be between £300 and £370 per patient per annum<sup>14</sup>. John has been diagnosed with diabetes and is therefore likely to be benefiting from outpatient care – costing, on average, £335 per annum to the NHS. As a consequence of the intervention, he has strongly reduced alcohol intake and is consequently potentially less likely to suffer from acute diabetes complications – such as cardiovascular pathologies. Had John not been part of the intervention, it is likely he would have suffered diabetes complications – thus requiring inpatient treatment. The net cost of this scenario would have been of £1,800 to £2,500, i.e. an average of £2,150 per annum, minus the cost of outpatient care (£335 per annum). This represents a total avoided cost of **£1,815** per annum.

### Avoided use of alcohol outpatient treatment

John suffered from alcoholism before participating in Ecominds. Alcoholism can induce costs to the NHS if the person accesses inpatient (rehabilitation) or outpatient medical services. We make the conservative assumption that he would have accessed outpatient services for persons suffering from alcoholism or drugs intake. The PSSRU has estimated that the unit costs of outpatient treatment for alcohol or drug abuse is of £94 per visit<sup>15</sup>. We assume that John would have visited the health specialists once a week. This means that had he not participated in Ecominds, the additional yearly costs to the NHS could have been of **£4,888**.

## Summary

Table 2 presents a summary of the economic benefits from the improvements that John has experienced. The total potential benefits of John participating in Green Gym are estimated to be **£7,370.19** per annum.

Table 2: Summary of annual economic benefits from John and Green Gym

| Benefits                             | Value (£)       |
|--------------------------------------|-----------------|
| Avoided prescription costs           | 258.27          |
| Avoided medical consultation costs   | 408.92          |
| Avoided diabetes complication costs  | 1,815.00        |
| Avoided alcohol outpatient treatment | 4,888.00        |
| <b>TOTAL</b>                         | <b>7,370.19</b> |

As with the previous case studies we make the assumption that the economic benefits are on a per year basis only. This is admittedly a very conservative assumption given that a failure to treat mental illness, diabetes and alcohol issues might induce further costs in various forms. However, in the absence of robust evidence no further assumptions on the duration of the benefits can be credibly made. Similarly, there is no available information on whether John might experience a relapse – thus essentially self-cancelling potential longer-run savings. We therefore consider the once assumption to be sensible.

## 4. Idle Valley and Wayne

### Overview

The Idle Valley Ecominds project aims to improve mental health and well-being by offering individuals the chance to get involved in a range of conservation, horticulture and wildlife gardening tasks.

Wayne's story creates over £4k of potential economic benefits in one year.

Wayne joined Nottinghamshire Wildlife Trust's Idle Valley Ecominds project in November 2010 following a three-month hospital admission. He attended weekly, with support from a mental health worker who accompanied him. Having just launched in September, the project was still in very early stages of development, and so Wayne had the perspective of seeing the project unfold over time.

Wayne is an ex-serviceman and has suffered from post-traumatic stress disorder and depression since coming out of active service in 1999.

He immediately showed a strong interest in woodworking and conservation, and this was nurtured and encouraged by staff and volunteers. Wayne was supported to identify areas of interest and skill and how he could contribute to the project, and set some aims to work towards. He was given the opportunity to work alongside a more confident volunteer who was interested in similar activities, giving him peer mentorship and encouragement. Another group member who was involved in voluntary work outside of the group – coaching a children's football team – encouraged Wayne to start coaching his local children's rugby team, and he has been volunteering in this capacity for two years now.

As Wayne's confidence has grown steadily over the years, he has gradually needed less support himself, and with encouragement has become more involved in the delivery and development of the group. First he started coming directly to the project without support from the mental health worker, then he gradually became more interested in the wider activities of the Wildlife Trust, joining a mainstream volunteer group (with peer support) as well as continuing to come to the Ecominds group. During a review of aims and goals (carried out every three to six months), he expressed an interest in green woodworking. Together with another volunteer he attended a course to learn woodworking skills that could be shared with others through workshops. This was an enormous boost to his confidence, leading to him conducting several demonstrations and workshops at open days and events at Idle Valley. It has also given him the confidence to start leading small groups of volunteers in woodworking tasks.

Alongside this, Wayne has also taken an interest in the development of the project, sitting on the Ecominds advisory group (a volunteer led group) and steering group.

Wayne says:

*"The way the group was run at first was more like 'we're doing this today'. Now it's us that have the plans and there's a lot more input from volunteers themselves. As I've become more involved I've got a lot more confident. I really like being able to help other people. Volunteers come and talk to me because they know I've been through the things they're going through."*

After approximately one year, Wayne's Community Psychiatric Nurse (CPN) started reducing her visits from every week to every two weeks, and then every month. His antidepressant (citalopram) medication was reduced from 60mg to 50mg. After 18 months he was discharged by his CPN.

## Outcomes

We consider that the potential benefits and avoided costs to the State and broader public sector are the following:

- Avoided prescription costs
- Avoided medical consultation costs
- Reduced number of visits from the community psychiatric nurse

## Economic benefits

### Avoided prescription costs

The LSE Mental Health Policy Group has estimated that for the total number of people with mental health problems accessing health services in one year (4.64 million British adults), the total NHS costs of medication prescriptions and therapies are £1.2 billion per annum. This is equivalent to **£258.27** per person using these services per year<sup>16</sup>. Although this figure is an average estimation, this study is the most robust estimate that has been produced so far. It avoids an assumption about specific services Wayne would have accessed in the absence of the intervention, and the unit costs of these services. It is also likely to be a conservative estimate, given that Wayne might have used above average medication prescriptions and therapies (e.g. inpatient rather than outpatient therapies)<sup>17</sup>. However, in the absence of more robust information it is sensible to use a conservative estimate in order to avoid over-claiming.

### Avoided medical consultation costs

The LSE Mental Health Policy Group has also estimated that for the total number of people with mental health problems accessing health services in one year (4.64 million British adults), the total NHS costs of various forms of consultation (predominantly primary healthcare access) is £1.9 billion per year. This is equivalent to **£408.92** per person accessing services per year<sup>18</sup>. The rationale for selecting this figure is the same as for avoided prescription costs. This figure is also a conservative estimate: for instance, it does not embody more acute use of secondary and tertiary health services.

### Reduced number of visits from the Community Psychiatric Nurse

Drawing on the research from the PSSRU, the cost of the CPN is estimated to be £67 per visit<sup>19</sup>. We assume that Wayne would receive a visit from the CPN once a week for a year. This represents a saving of **£3,484**.

## Summary

Table 3 (see page 15) presents a summary of the potential economic benefits from the improvements that Wayne has experienced. The total benefits from Wayne participating in the Idle Valley Ecominds groups are estimated to be **£4151.19** for one year.

As with previous case studies we make the assumption that the economic benefits are for one year only. This is for the same reasons as those cited so far in this report: lack of evidence about duration of these outcomes and the extent to which Wayne might relapse. We therefore consider that this conservative assumption is sensible.

*Table 3: Summary of annual economic benefits from Wayne and Idle Valley*

| <b>Benefits</b>   | <b>Value (£)</b> |
|---|------------------|
| Avoided prescription costs                                    | 258.27           |
| Avoided medical consultation costs                            | 408.92           |
| Reduced number of visits from the community psychiatric nurse | 3,484.00         |
| <b>TOTAL</b>  | <b>4,151.19</b>  |

## 5. Big Wood and Jack

### Overview

Big Wood is an established but neglected woodland in Lincolnshire. The project offers purposeful activities in a green environment to anyone experiencing challenges to their mental health and wellbeing.

Jack's story creates over £6k of potential economic benefits in one year.

#### *Issues and challenges*

Jack was referred by Rethink to the woodland-based Hill Holt Health Ecominds mental health recovery project at Big Wood in June 2011.

He was diagnosed with schizoaffective disorder: was unable to work, socially excluded within his home market town and presenting psychotic symptoms. He was on antipsychotic and mood stabilising medication. Jack faced a range of challenges due to his mental health problems. He was fearful of being in new situations and/or meeting new people. His thinking processes and mood fluctuation were affected and his lack of trust evoked paranoid thoughts. He was often immobilised by depression and a fear of becoming so unwell that his relationship with his long term partner would breakdown.

#### *Actions, support and signposting*

The lead woodland ranger together with the Health and Care Professions Council (HCPC) registered professional worked with Jack to plan a programme responsive to his individual needs, enabling him to attend the project two days a week. A Recovery Star<sup>20</sup> chart scored his initial assessment as low in three main areas: managing his mental health, self-esteem and self-care.

Intensive support was put in place to support Jack in engaging with existing Big Wood volunteers in practical outdoor work and building trust in shared activity around the woodland. Jack was encouraged to use dormant skills in woodworking – this meant he could relax and enjoy participating without pressure.

Over time this approach and his improved self-confidence opened up new opportunities leading to a role in designing and building structures within the project. Real friendships developed as Jack benefited from the emotional support from staff and peers at Big Wood.

Jack did have periods of relapse and would take 'time out' for a few days supported at home by his partner and on-going access to Rethink. Hill Holt Health referred him for six counselling sessions delivered within the project.

Jack's ability to self-manage increased over the next six months, his medication was reduced and his Recovery Star scores indicated improvement in overall wellbeing by January 2012. As the green environment impacted on building his mental and physical resilience Jack felt ready to consider the working world and a work placement on the main Hill Holt Health site was agreed with the CEO in February 2012. His start date was delayed as he needed Jobcentre Plus permission to transfer from volunteer to work experience status. The Hill Holt Health lead worker supported him to attend these appointments.

#### *Positive outcomes*

By late 2012, Jack had established himself as a valued member of the Big Wood volunteer group. The lead ranger was able to delegate responsibility with confidence to Jack across the varied ancient woodland management activities. His creative ability with joinery/woodworking meant he could make pieces to take home - a further demonstration of his transferrable skills. His relationship remains intact and partner supportive throughout. They are expecting a baby in late autumn.



Jack began applying for vacancies in late 2012 with excellent references from Hill Holt Wood. He was initially unsuccessful but in March 2013 secured a full time permanent post as a data analyst with the City Council. His sense of worth at being able to provide for his family is palatable.

As an accomplished musician, Jack returns to Big Wood to support events and enjoy his established friendships. He is no longer on medication or open to NHS mental health services.

## Outcomes

We consider that the potential benefits and avoided costs to the State and broader public sector are the following.

- Avoided prescription costs
- Avoided medical consultation costs
- Avoided benefits payments as a consequence of moving into employment
- Avoided Disability Living Allowance costs
- Increased tax receipt to the Exchequer as a consequence of moving into employment
- National Insurance contributions as a consequence of moving into employment

## Economic benefit

### Avoided prescription costs

The LSE Mental Health Policy Group has estimated that for the total number of people with mental health problems accessing health services (4.64 million British adults per annum), the total NHS costs of medication prescriptions and therapies are £1.2 billion per annum. This is equivalent to **£258.27** per person using these services per year<sup>21</sup>. Although this figure is an average estimation, this study is the most robust estimate that has been produced so far. It avoids an assumption about the specific services Jack would have accessed in the absence of the intervention, and the unit costs of these services. It is also likely to be a conservative estimate, given that Jack might have used above average medication prescriptions and therapies (e.g. inpatient rather than outpatient therapies)<sup>22</sup>. However, in the absence of more robust information it is sensible to use a conservative estimate in order to avoid over-claiming.

### Avoided medical consultation costs

The LSE Mental Health Policy Group has also estimated that for the total number of people with mental health problems accessing health services in one year (4.64 million British adults), the total NHS costs of various forms of consultation (predominantly primary healthcare access) is £1.9 billion per year. This is equivalent to **£408.92** per person accessing services per year<sup>23</sup>. The rationale for selecting this figure is the same as for avoided prescription costs.

### Avoided benefits payments as a consequence of moving into employment

Jack managed to gain employment as a consequence of Ecominds support. This generates savings to the State by avoiding Jobseeker's Allowance payments. As Jack is over 25 the benefits for persons above 25 years old are a minimum of £71.70 per week or **£3,728.40** per annum<sup>24</sup>.

### Avoided Disability Living Allowance costs

Passing from an unemployment condition into employment also induces avoided Disability Living Allowance costs, i.e. a second saving to the State. Minimum Disability Living Allowance is £21 per week, i.e. **£1,092** per year<sup>25</sup>. This is a conservative figure given that it is the strict minimum that can be paid.

### Increased tax receipt to the Exchequer as a consequence of moving into employment

Moving into employment implies an additional tax contribution to the Exchequer. We assume that Jack earns the legal minimum wage – which is a conservative assumption. Hourly minimum wage in the UK for 2013 is £6.31 per hour. Assuming 37.5 working hours per week, this is equivalent of an income of £12,304.50 per year. For a gross income of £12,304.50 the tax intake is estimated at **£572.90** per annum<sup>26</sup>.

### National Insurance contributions as a consequence of moving into employment

Finally, moving into employment leads to a NI contribution. For a gross income of £12,304.50 (as calculated above) the NI contribution is estimated to be of **£545.94** per annum<sup>27</sup>. This is also a cashable benefit accruing the State.

## Summary

Table 4 presents a summary of the economic benefits from the improvements that Jack has experienced. The cashable benefits are twofold: direct avoided costs to the NHS, estimated to be of a total of **£667.19** per annum and indirect avoided costs and benefits generated to the Exchequer, estimated to be **£5,939.24**. As such, the total cashable economic benefits are estimated to be **£6,606.43** for one year.

Table 4: Summary of annual economic benefits from Jack and Hill Holt

| Benefits                            | Value (£)       |
|-------------------------------------|-----------------|
| Avoided prescription costs          | 258.27          |
| Avoided medical consultation costs  | 408.92          |
| Avoided Jobseeker's Allowance       | 3,728.40        |
| Avoided Disability Living Allowance | 1,092.00        |
| Increased tax contribution          | 572.90          |
| Increased NI contribution           | 545.94          |
| <b>TOTAL</b>                        | <b>6,606.43</b> |

As with previous case studies we make the assumption that the economic benefits are for one year only. This is for the same reasons as those cited so far in this report: lack of evidence about duration of these outcomes and the extent to which Jack might relapse. We therefore consider that this conservative assumption is sensible.

## 6. Minding the Garden and Gary

### Overview

**Minding the Garden is an ecotherapy volunteer programme specifically designed for people living in and around Hart District, North Hampshire, who are experiencing mental health problems.**

**Gary's story creates nearly £4.5k of potential economic benefits in one year.**

Minding the Garden (MtG) provides ecotherapy for people experiencing mental health problems or learning difficulties. The aims are to aid recovery and assist 'supported volunteers' in moving into mainstream volunteering, further education or paid employment. Volunteers also have the opportunity to acquire work experience - gaining in confidence and self-esteem.

Gary joined MtG in the summer of 2011 as a supported volunteer. He was feeling isolated and finding it difficult to leave his home due to experiences as a teenager. He was suffering with an Obsessive Compulsive Disorder (OCD) with anxieties. With encouragement, Gary was able to attend an informal interview to join the ecotherapy gardening project. Once on board Gary went from strength to strength, including travelling to and from the project by public transport. Gary said during a one to one with staff that before joining the project he 'felt worthless'. Gary explained, "I wasn't volunteering and felt my previous volunteering experience wasn't too good."

Gary became a very enthusiastic and humorous member of the team, always working hard and giving his utmost. Regular weekly gardening activity gave Gary the confidence to engage with fellow volunteers and staff members. Gary was quoted as saying "I now share jokes occasionally which I didn't do before." Also, when asked about how the project was helping his health he said that he "felt a sense of worth", and regarding physical health his "stamina had improved...would get more tired than I do now".

When asked what Gary enjoyed when going out on gardening projects he said "being active and physical health is very important to me. Seeing the finished garden and the hard work I've put in to transform the garden's appearance and quality is something I enjoy.... you don't have to talk to others if you don't want to .... it's an opportunity to do something worthwhile and valuable and gives you a feel good factor, pride in the work you do and accomplish." Gary was also keen to say that "knowing you helped a service user (gardening client) out and that your role in society is valuable / valued." Gary also said "you may even discover an interest you didn't have before".

After a few months Gary started to volunteer in the office twice a week, using his eye for detail and quality to help with marketing stands and literature. Gary explained "it's a change from the physical work and adds variety to my week. It allows me to experience a different type of work and build on admin and office skills. I can add these to my CV if I want to". He added that it allowed him to influence the development of the project and feel more responsible. Gary also joined a conservation volunteering group having discussed the opportunities with the MtG project officer.

In early 2012 Gary was keen to look for opportunities for jobs in horticulture. He discussed the new skills he had acquired, stating "new found interest in horticulture, physical, outdoor, manual work which I haven't had before I joined the project." With support from parents and MtG staff members, Gary applied for an apprenticeship role in horticulture with a local independent school.

MtG Project Officer Guy Clayton was in the office with Gary on the day he

received the phone call offering him the job. Guy stated: “it was one of my proudest moments since establishing Minding the Garden over four years ago. Seeing Gary’s reaction was incredible! Gary’s story is a great example of why we set up the project”.

Gary has now been at his apprenticeship for over a year (with a day release to a local horticultural college), and is commuting to and from the school on his newly acquired moped. He also regularly plays five- a-side football with the staff and is in contact with another volunteer (and the volunteer’s family) from the project.

## Outcomes

We consider that the potential benefits and avoided costs to the State and broader public sector are the following.

- Avoided services use and treatment costs
- Avoided benefits payments as a consequence of moving into apprenticeship and better managing his OCD
- Avoided Disability Living Allowance as a consequence of moving into apprenticeship and better managing his OCD

## Economic benefits

### Avoided service use and treatment costs

OCD is a form of anxiety disorder that Gary seems to better manage. We can consider that, had the intervention not taken place, Gary would have sought treatment for OCD. The National Institute for Health and Clinical Excellence (NICE) has estimated the direct treatment costs of OCD in the UK<sup>28</sup>. The total average medication and prescriptions costs per person per treatment amounts to £322.14 for medication (antidepressants, hypnotics, anxiolytics, and anti-psychotic drugs), while the total average psychological intervention (e.g. Cognitive Behavioural Therapy) costs an additional £558 per person per treatment. Therefore the total cost per person per treatment for OCD amounts to £880.14. Although Ecominds helped Gary to substantially improve his condition, Gary has not completely overcome his OCD pathology. We thus cannot categorically assume that Gary will not use any service or treatment as a consequence of the intervention. Rather, what we can assume with a degree of confidence is that Gary is not anymore in an acute situation. As such, we consider that only part of service and treatment costs have been avoided as a consequence of the intervention. Due to lack of pervasive evidence, we assume that 50% of medication and treatment costs have been avoided as a consequence of the intervention. Under this rationale, the avoided costs amount to 50% of £880.14, i.e. **£440.07** per annum.

### Avoided benefits payments as a consequence of moving into apprenticeship and better managing his OCD

As a consequence of the intervention Gary managed to enter an apprenticeship scheme. Undertaking the apprenticeship means that he no longer received Jobseeker’s Allowance. This is a direct benefit to the Exchequer. We assume that Gary is in his early twenties and therefore would be paid benefits for

persons below 25 years old. This is a minimum of £56.80 per week or **£2,953.60** per annum<sup>29</sup>.

### **Avoided Disability Living Allowance as a consequence of moving into apprenticeship and better managing his OCD**

Entering into employment following improved mental health can also result in avoided Disability Living Allowance and another saving for the State. Minimum Disability Living Allowance is £21 per week, i.e. **£1,092** per year<sup>30</sup>. This is a conservative figure given that it is the strict minimum that can be transferred.

## **Summary**

Table 5 presents a summary of the economic benefits from the improvements that Gary has experienced. The cashable benefits are twofold: direct avoided costs to the NHS, estimated to be of a total of **£440.07** per annum and indirect avoided costs to the benefit of the State, estimated to be **£4,045.60**. As such, the total cashable economic benefits are estimated to be **£4,485.67** on a per year basis.

*Table 5: Summary of annual economic benefits from Gary and Minding the Garden*

| <b>Benefits</b>                            | <b>Value (£)</b> |
|--|------------------|
| Avoided OCD treatment and medication costs | 440.07           |
| Avoided Jobseeker's Allowance              | 2,953.60         |
| Avoided Disability Living Allowance        | 1,092.00         |
| <b>TOTAL</b>                               | <b>4,485.67</b>  |

It is worth noting that being in an apprenticeship scheme generates a low, non-taxable, gross revenue (the minimum apprenticeship wage is £2.65 per hour or £5,167.50 per annum). This means that until Gary moves from apprenticeship into an employment contract, the benefits to the Exchequer do not include tax contribution or NI contributions.

## 7. Conclusion

**There are potentially significant economic benefits to the State from the Ecominds projects featured in this study.**

**This analysis would be further strengthened by including the social value created to individuals, in addition to the economic value to the public purse.**

This case study analysis from the Ecominds programme indicates that there are potentially significant economic benefits to the State from these interventions, over and above the impact on the individuals' well-being.

As aforementioned, all benefits have been calculated on a one year basis, as further evidence would be required to assume a longer-term duration of benefits. However, for some outcomes it is very likely that the benefits will have long-term effects, both in terms of avoided health service use and in terms of indirect economic impacts.

This analysis does not deal with longer-run economic costs, such as the medium to long-run economic implications of Years of Life Lost (YLL) and/or Years of Life with Disability (YLD) which can be substantial. This is a second factor that potentially underestimates the actual benefits of the interventions. However, more evidence would be required in order to assess the extent to which these Ecominds projects lead to substantial long-run positive impacts.

It is evident that the case studies with the greatest economic benefits are those that led to an employment position. This is consistent with existing literature, which suggests that indirect economic costs of mental health illnesses are systematically higher than direct service costs<sup>31</sup>. As such, interventions that aim to tackle both the direct and indirect implications of mental health costs to society are likely to generate higher cashable and non-cashable benefits (avoided losses) than the ones that do not.

This analysis would be further strengthened by assessing the socio-economic value created both to the individual from the changes they have experienced and to the wider local communities, as this will allow a holistic understanding of the social and economic benefits of these projects. In addition, a detailed assessment of the counterfactual (what would have happened in the absence of Ecominds) would allow a full impact assessment, which would help to understand the role that Ecominds has played in creating positive changes in the lives of their beneficiaries.

Last but not least, the creation of a data system which tracks the progression of individuals over time and Ecominds contribution to this progression would allow the capture of the socio-economic impact of Ecominds more accurately. This system would be designed to capture a baseline and progress on mental health conditions, employment status and usage of NHS services. It would also capture attribution to the Ecominds projects and qualitative assessment on the counterfactual. It is important for such a system not to be overly onerous on projects, but to be designed as a complement of the projects' work by providing an understanding of measurable change in mental health and evidence of wider socio-economic impact. The system could be applied to a sample number of projects that represent the diversity of all the projects and that would allow the results to be scaled up.

## Endnotes

- 1 National Mental Health Development Unit (2012), “Factfile 3: The costs of mental ill health”.
- 2 The Centre for Economic Performance’s Mental Health Policy Group (2012), “How mental illness loses out in the NHS”, London School of Economics report. Data in table 1, page 7 of the report states that 1% of the British adult population suffers from schizophrenia and another 16% suffers from depression and anxiety disorders i.e. a total of 17%. We calculate that the total number of adults falling in either category is 8,850,200.000 people, out of a total British adult population of 52.06 million. Amongst those with schizophrenia prevalence 80% of patients access services/treatment, amongst those with depression 25% access services/treatment, and amongst anxiety disorders another 25% access services/treatment. This gives us an average of 52.5% of adults with a mental health condition accessing services/treatment. As such, out of the 8,850,200.00 adults with mental health issues only 52.5% actually access these services, which is 4.64 million people.
- 3 The Centre for Economic Performance’s Mental Health Policy Group (2013), “How mental illness loses out in the NHS”, London School of Economics report.
- 4 This figure is very likely to underestimate the avoided service use and thus the benefits of the intervention. Although some form of access to secondary and tertiary services were determined and quantified, which in this case were the use of community psychiatric nurse services, Joanne might have used additional services. This, however, could not be determined based on available information.
- 5 The Centre for Economic Performance’s Mental Health Policy Group (2013), Op. Cit.
- 6 PSSRU (2012), “Unit Costs of Health and Social Care 2012”, Personal Social Services Research Unit, University of Kent
- 7 Government official webpage:  
<https://www.gov.uk/jobseekers-allowance/what-youll-get>
- 8 Government official webpage:  
<https://www.gov.uk/dla-disability-living-allowance-benefit/what-youll-get>
- 9 Salary, tax and other contributions calculator:  
<http://www.thesalarycalculator.co.uk/hourly.php>
- 10 Salary, tax and other contributions calculator:  
<http://www.thesalarycalculator.co.uk/hourly.php>
- 11 The Centre for Economic Performance’s Mental Health Policy Group (2013), Op. Cit.
- 12 This figure is very likely to underestimate the avoided service use and thus the benefits of the intervention. Although some form of access to secondary and tertiary services were determined and quantified, which in this case was the avoided use of alcohol outpatient treatment and avoided costs of services for diabetes complication, John might have used additional secondary and tertiary services services. This, however, could not be determined based on available information.
- 13 The Centre for Economic Performance’s Mental Health Policy Group (2013), Op. Cit.
- 14 Kanavos, P., van den Aardweg, S., Schurer, W (2012), “Diabetes expenditure, burden of disease and management in 5 EU countries”, LSE Health: London School of Economics.
- 15 PSSRU (2012), Op. Cit.

- 16 The Centre for Economic Performance's Mental Health Policy Group (2013), Op. Cit.
- 17 This figure is very likely to underestimate the avoided service use and thus the benefits of the intervention. Although some form of access to secondary and tertiary services were determined and quantified, Wayne might have used additional secondary and tertiary services beyond the use of a CPN. This, however, could not be determined based on available information.
- 18 The Centre for Economic Performance's Mental Health Policy Group (2013), Op. Cit.
- 19 PSSRU (2012), Op. Cit.
- 20 The mental health Outcomes Star <http://www.outcomesstar.org.uk/mental-health/>
- 21 The Centre for Economic Performance's Mental Health Policy Group (2013), Op. Cit.
- 22 This figure is very likely to underestimate the avoided service use and thus the benefits of the intervention. Although some form of access to secondary and tertiary services were determined and quantified, Jack might have used additional secondary and tertiary services beyond those identified. This, however, could not be determined based on available information.
- 23 The Centre for Economic Performance's Mental Health Policy Group (2013), Op. Cit.
- 24 Government official webpage:  
<https://www.gov.uk/jobseekers-allowance/what-youll-get>
- 25 Government official webpage:  
<https://www.gov.uk/dla-disability-living-allowance-benefit/what-youll-get>
- 26 Salary, tax and other contributions calculator:  
<http://www.thesalarycalculator.co.uk/hourly.php>
- 27 Salary, tax and other contributions calculator:  
<http://www.thesalarycalculator.co.uk/hourly.php>
- 28 NICE (2005), "National cost impact report: Implementing the NICE clinical guideline on obsessive-compulsive disorder". NICE Clinical Guidelines No 31.  
<http://www.nice.org.uk/nicemedia/pdf/cg031costing.pdf>
- 29 Government official webpage:  
<https://www.gov.uk/jobseekers-allowance/what-youll-get>
- 30 Government official webpage:  
<https://www.gov.uk/dla-disability-living-allowance-benefit/what-youll-get>
- 31 See for example: McCrone et al. (2008), "Paying the price: The cost of mental health in England to 2026", The King's Fund reports.  
[http://www.kingsfund.org.uk/sites/files/kf/Paying-the-Price-the-cost-of-mental-health-care-England-2026-McCrone-Dhanasiri-Patel-Knapp-Lawton-Smith-Kings-Fund-May-2008\\_0.pdf](http://www.kingsfund.org.uk/sites/files/kf/Paying-the-Price-the-cost-of-mental-health-care-England-2026-McCrone-Dhanasiri-Patel-Knapp-Lawton-Smith-Kings-Fund-May-2008_0.pdf)





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