Impact of access to on line peer support on IAPT service usage and cost

Summary

This report will assess the economic impact of the introduction of an additional intervention during the waiting period to begin psychological therapy with an Improving Access to Psychological Therapies service in Hounslow, London. The additional intervention is the on line support network provided by Big White Wall (BWW)¹. The report will focus on the clinical outcomes and service use of a group of patients who used the BWW support network and compare it with a group of matched patients who did not, to determine the clinical and cost effectiveness of this additional intervention. It will describe the services, the relevant costs of the services, review the benefits of those services and where possible these benefits will be monetised.

Background & context

Common Mental illness and its costs

Common Mental Illness (CMI) affects one in six of the UK population (ONS 2007). This has an impact on those individuals' quality of life, their families and friends. Many are not able to fulfil their potential, and significant numbers of people claim long term sickness benefits (such as Employment or Support Allowance and Incapacity Benefit) as a result of depression or anxiety (over 40% of claimants of these benefits do so for a mental or behavioural condition). It is also of note that those who are unemployed have 4 to 10 times the risk of having an anxiety disorder or depression (Royal College of Psychiatrists 2008) after just 12 weeks out of work. Stress and mental illness are also significant causes of sickness absence of people who are in employment. In the latest CIPD absence survey (CIPD & Simply Health 2014), approximately 30% of employers report mental illness as one of the main causes of short term sickness absence, and nearly 60% for long term absence. It is a similar figure for stress, but with approximately 50% reporting stress as a significant cause of short-term absence. This, and being at work when not performing due to a mental health condition (presenteeism) have been estimated by the Centre for Mental Health (CMH) to cost employers over £25 billion per annum. The OECD estimate that mental illness costs Britain £70 billion per annum².

¹ https://www.bigwhitewall.com/landing-pages/landingv3.aspx?ReturnUrl=%2f#.VgK5faJWJ08

² http://www.theguardian.com/society/2014/feb/10/mental-health-issues-uk-cost-70bn-oecd

IAPT services

The Improving Access to Psychological Therapies (IAPT) programme was implemented on the premise articulated by Prof Richard Layard and others (Centre for Economic Performance 2006)) that providing Cognitive Behavioural Therapy (CBT) to those claiming long term sickness benefits (Incapacity Benefit at the time) for mental illness would pay for itself by reducing the number of people who are claiming those benefits. It began in 2006, with a national roll out beginning in 2008. Its objective is to implement NICE guidance for anxiety disorders and depression (NICE 2011), through recruiting and training a new workforce to provide (initially) CBT within a stepped care framework (see figure 1 below).

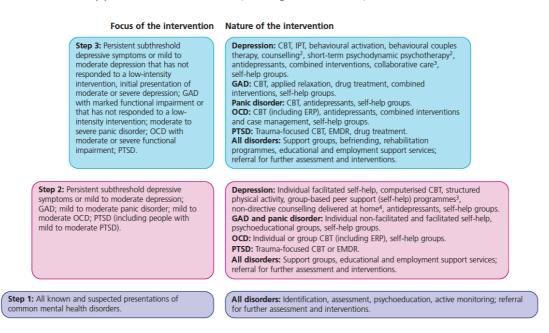


Figure 1; Stepped Care Framework for the treatment of anxiety disorders and depression (NICE 2011).

The IAPT programme has recruited and trained a workforce for step 2 and step 3 interventions. Services accept professional and self referrals, with the objective of working with at least 15% of those with a common mental illness. Thus the services need to help large numbers of people. The provision at step 2 is largely guided self help based on CBT, provided by Psychological Wellbeing Practitioners and this can be face to face or provided over the phone for 4-6 contacts. At step 3 therapy is more "traditional" being largely face to face and for 8-12 contacts. Some additional evidence based therapies for depression are available at step 3, including Interpersonal Therapy and Counselling for Depression.

Peer Support and the Big White Wall

It will be noticed in the stepped care model, that self help groups and peer support are included in the evidence-based interventions at step 2. Peer support is specifically for those with long term physical health conditions in the guidance.

Interest in peer support for those with a wide range of mental health conditions has grown rapidly in recent years. It has been defined as;

"mutual support provided by people with similar life experiences as they move through different situations". This mutual support may be social, emotional or practical support (or all of these) but importantly it is reciprocal, allowing peers to benefit from the support whether they are giving or receiving it." Lawton Smith 2013, and citing Rapper and Cater 2010.

It has also been noted that there is a growing interest in on line peer support in the US, particularly amongst those who are depressed (De Andrea & Antony 2013). They estimate that 0.3% of the population want on line support each year.

Big White Wall's Support Network seeks to provide peer support on line following the definition above. When people log on, they can see a number of "bricks". Each brick has been created by one of the online members and represents an issue they would like to talk about. Other members can then click on that brick to join the conversation, or create a brick of their own. Most people use BWW for "talkabouts" which are moderated discussion forums, where a member can start or join in conversation threads. One important aspect of this service is that it is that moderation is monitored continuously by a qualified therapist, so that should anyone express any risks to themselves or others it can be quickly spotted and addressed, and similarly any abusive interactions can be interrupted. For a commissioner or provider of a publicly funded health service that reassurance is significant.

BWW and Hounslow IAPT service

In 2013, following the awarding of the contract to provide the IAPT service in Hounslow to West London Mental Health NHS Trust, it was agreed that the service would pilot the use of the BWW support network, and BWW was jointly commissioned by Hounslow Clinical Commissioning Group and the trust. The service was made available to all of those who were referred to the IAPT service (unless there were clinical reasons not to do so), from 2014. The patient would be given details of how to log in to the service so that they could use it whilst they were waiting to enter therapy and the prescription would last for up to six months, so the person could potentially continue to use it throughout and after therapy.

This report assesses the cost effectiveness of this addition of BWW to the Hounslow IAPT service as described above.

Results

The sample

At the time of data collection 1073 people had been offered prescriptions to the BWW. 316 had been activated. Of those, 72 people had used BWW for more than an hour. The team took the decision that usage under an hour was unlikely to be helpful and so excluded all those who had used it for less.

A total of 40 patients were identified from the data set who had used the Big White Wall support network for more than 1 hour and for whom the necessary data was available.

They were then matched with 40 patients who had not used the BWW on gender, age and diagnosis.

Full demographic data of the two matched samples, BWW users and BWW non-users, is in table 1.

TABLE 1: Demographics of two samples

Variable	BWW	Non BWW
Gender		
Male	9	9
Female	31	31
Age band		
18-24	5	5
24-34	14	14
34-44	10	10
45-55	7	7
55-64	2	3
65+	2	1
Ethnicity		
White	20	29
Mixed	2	1
Asian	15	5
Black	1	1
Other	1	4
Not known	1	
Employment		
FT (>30 hours per week)	15	21
PT	7	6
Unemployed	8	6
FT student	2	1
Retired	3	2
FT homemaker/carer	5	
Self employed	1	4
unknown	1	

Variable	BWW	Non BWW
Benefits		
Υ	33	38
N	5	2
Not known	2	
Medication		
Prescribed and taking	22	13
Prescribed and not taking		3
Not prescribed	17	24
Not stated		
unknown	1	
Location		
Bedfont		
Brentford	3	1
Chiswick	6	8
Cranford		
Feltham	6	5
Hanworth		
Heston		
Hounslow	14	14
Isleworth & Syon	8	9
Osterley & Spring Grove		
Turnham Green		
Outside borough	3	3
Diagnosis		
Mixed Anxiety &	17	17
Depression		
Anxiety Disorder	10	10
Depression	13	13

As can be seen from table 1, the BWW support network users were mainly women aged 24-44. Ethnically, the BWW sample was more diverse – with significant proportions of Asian as well as white people whereas it was predominantly white people in the non BWW sample. The non BWW sample was more likely to be employed, they were also more likely to be claiming benefits. More people in the BWW group were prescribed and taking medication.

Service input, Reliable Improvement & Recovery

Tables 2 and 3 show the data for the two samples on the key issues of service input and clinical outcome. Clinical sessions includes treatment sessions only, and does not include assessment, as all will receive one assessment session (this is exceeded only on very rare occasions). Although we are only able to cost "sessions" as opposed to hours of service input (see below), we have included time here to show there were no significant differences between the number of sessions and time from the service, which would affect the calculation of service cost.

TABLE 2: Service input by sample

Sample	Total clinical sessions	Mean clinical sessions	Range clinical session	Total clinical time	Mean clinical time	Range clinical time
BWW	359	8.98	2 - 26	271.6	6.79	0 - 21
Non BWW	357	8.93	1-30	261.32	6.53	0.75 –
						26.25

As can be seen, there is minimal difference between the samples on total and mean number of clinical sessions between those who did and those who did not use BWW. Similarly the difference in the amount of clinical time inputted is minimal.

TABLE 3: Clinical outcomes by sample

Group	PHQ RI	PHQ RR	GAD RI	GAD RR	Combined	Combined RR
					RI	
BWW	21	17	26	19	27	14
Non	19	14	31	19	35	9
BWW						

Reliable improvement is when the change in score between first and last contact on a questionnaire is equal to, or exceeds a set figure. For the PHQ9 this is >/=6, for the GAD7, it is >/=4. Recovery is when the final score is less than 10 for the PHQ9, or 8 for the GAD7.

Both samples saw approximately 50% reliably improve on the PHQ9, and reliably recover on the GAD7. However, more people reliably recovered on the PHQ9 in the BWW sample, and more recovered on the GAD7 in the non BWW sample. When these two items are combined, more people in the non BWW sample reliably improve, and more in the BWW reliably recover.

More prospective analysis of this is needed, but at this point it is reasonable to say there is no consistent difference between the samples on clinical input or outcome.

Service costs

Calculation for the cost per clinical contact

As part of the preparation for the introduction of a "payment by results" system for funding mental health services, the finance department of West London MH NHS trust calculated a cost per clinical contact (i.e. one clinical session) for the IAPT service in Hounslow. This was £65.64. This figure was calculated by taking the total service spend in that year and dividing it by the total number of clinical contacts within that year. This figure therefore includes a proportion for overheads, such as accommodation, training, employer on costs etc. However as the figure uses the total number of contacts it also includes screening and assessment appointments, as well as treatment. This report includes only treatment sessions. The figure derives from 2013-14, whilst the activity reported here is from 2014 onwards. To express this figure in "today's money" i.e. 2015 values, the Bank of England recommend using an adjustment for inflation of 2.5%³ per annum. This equates to £1.64. The cost figure to be used here therefore will be £67.28 per clinical session. This calculation applies equally to both samples, as there was no difference in the treatment provided by the service, with or without having used the BWW first.

Calculation for the cost of BWW

The cost for access to the BWW on line support network is £100 per user. The licences for this are purchased in advance, and so under use would in fact increase the actual costs per licence. At the time of our data, not all licences had been taken up, but it is understood that they have mostly been used now. The figure of £100 per licence will therefore be used.

There is also an additional cost in the training of the staff about the BWW so that they can explain this to patients. This was done within existing service meetings and so no additional cost is added to this calculation. In offering someone the option of using BWW the worker needs to spend some time explaining the additional service to them. Whilst probably brief, this will have a cumulative impact on service capacity. For the calculations here, it has been estimated that 5 minutes will be needed to explain the BWW service. That 5 minutes will have come from the clinical session. There is therefore an opportunity cost, which will not be monetised, and which would have minimal impact on the clinical content overall and applies to all who were offered the service regardless of uptake.

To calculate the cost of the service input, the mean number of clinical sessions is used to calculate the mean cost of service input.

Table 4 sets out the cost of each intervention by sample. These figures indicate that the BWW adds 14% to the service cost.

³ Actual inflation for this service may be different, but is not known

TABLE 4: cost of each intervention by sample

sample	Cost of	Cost of	Training	Additional	Total cost
	mean	BWW	costs	time costs	
	clinical	licence			
	sessions				
BWW	8.98 x	£100	£0	£0	£704.17
	£67.28 =				
	£604.17				
Non BWW	8.93 x	£0	£0	£0	£600.81
	£67.28 =				
	£600.81				

There is also a cost to the patient – they need to have the necessary IT equipment and give the time to use the BWW, for example. Whilst costs could perhaps be attached to these, as the BWW is voluntary and this report focuses on costs to the service only. However some potential users of BWW may be excluded by the cost implications of having the means to access it.

From the figures presented above, the addition of the BWW adds to the cost of an intervention, without reducing subsequent use of the service as measured by contacts and time. However, there may be differences in clinical outcomes between the samples. For the BWW to be cost effective it would need to have at least 14% better outcomes.

Non monetisable considerations

Patient Satisfaction

Satisfaction with a service is an important consideration – though hard to monetise. A survey was conducted by the BWW from September to October 2015. This was therefore a different sample to the one used for the previous analysis. This survey had a 21% response rate (a total of 26 people responded). 62% of them would recommend BWW to others.

Self reported benefits

59% of survey respondents reported at least one wellbeing gain, most commonly feeling less isolated, but also including better coping and insights into self. In terms of using GP services, 17% of the survey respondents did not use out of hours services as a result of using BWW, and 13% used general GP services less.

This is a small number of BWW members, so limiting the generalisability of these data. The most frequently reported gains of reduced isolation have face validity for the on line support network. It is also interesting that some report reduced use of GP services. It is not possible to quantify this change of use and so monetise it, and also 17% equates to 4 members and so very small numbers. However, if it has this impact for some people, it does need to considered in an economic analysis. Unfortunately this analysis is not in a position to do this.

Discussion

This report has reviewed the impact of the additional use of the BWW on line support network during a period of waiting for treatment. Using a sample of users of the network with matched controls, it has found that there is no clear difference between those groups in terms of service usage and clinical outcomes. With the additional investment required to provide access to the support network, there is no clear monetisable benefit to funding such a service in this context.

Since the inception of the service reviewed here the BWW has enhanced it's service at no extra cost to include access to on line self help materials and providing a video platform to enable therapists to deliver their interventions via a "Skype" type of connection. This review does not take those additions into account, and they may influence the economic assessment of the service.

This is a retrospective study with a small sample, which has been matched on a range of demographic variables, but these may not be the most pertinent. This study also did not follow up those who had used BWW. There may have been benefits over the long term which this report therefore misses, such as a reduced relapse/re-referral rate. If such a benefit did occur it would need to be considered and monetised.

As there is a drive to consider how digital services can increase the quality and efficiency of clinical services, and a range of digital services are being developed, it is important that where tried, such services are properly evaluated. Further research is recommended to proactively establish the economic and service impacts, and clinical outcomes of using such a service. This should include wider service use such as use of generic primary care and GP services, sickness absence, and qualitative data to understand more about why people did or did not used this additional service.

References

Office of National Statistics (2007); Adult Psychiatric Morbidity Survey. HMSO.

Royal College of Psychiatrists. (2008). *Mental Health and Work.* Royal College of Psychiatrists.

CIPD & Simply Health (2014); Absence Management. https://www.cipd.co.uk/hr-resources/survey-reports/absence-management-2014.aspx

Centre for Mental Health;

http://www.centreformentalhealth.org.uk/employment/index.aspx

Centre for Economic Performance (2006); Depression Report; a new deal for depression and anxiety disorders. LSE.

NICE (2011): Common Mental Health Disorders. Clinical Guideline 123.

Lawton-Smith S. (2013); Peer Support in Mental Health; Where are we Today? Journal of MH training, education and practice. Pp152-8.

Repper, J. and Carter, T. (2010), Using Personal Experience to Support Others With Similar Difficulties: A Review of the Literature on Peer support in Mental Health Services, Together, University of Nottingham and NSUN, London.

<u>DeAndrea, D C</u>; <u>Anthony, J C</u>. (Nov 2013): Online peer support for mental health problems in the United States: 2004-2010 Psychological Medicine 43.11 2277-88

This case study was completed by **Brendan McLoughlin** in **December 2015**. Whilst undertaking this case study Brendan was Clinical Lead Ealing IAPT, West London Mental Health NHS Trust.

Brendan successfully completed a collaborative learning programme designed to empower nurses to understand, generate and use economic evidence to continuously transform care. The programme was delivered by the Royal College of Nursing and the Office for Public Management, funded by the Burdett Trust for Nursing and endorsed by the Institute of Leadership and Management.

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