

Improving Access to Psychological Therapies (IAPT) Programme: Scrutinising IAPT Cost Estimates to Support Effective Commissioning

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Abstract

An estimate of costs per session of the Improving Access to Psychological Therapies (IAPT) Programme was developed using data in the public domain and material obtained by Freedom of Information (FOI) request, with reference to other recent research. The estimate markedly exceeds that used in the Department of Health Impact Assessment, and with other factors such as the need to take account of a higher level of patient dropout in presenting IAPT's success rate, unexpectedly low numbers of sessions offered, and the scale of wrongful disentanglement from incapacity benefits, suggests a need to reassess the original cost benefit claims for IAPT. Funding data were obtained through a FOI request of 108 Primary Care Trusts (PCTs) (seventy-eight per cent of the total approached). Cost estimates per session were developed using IAPT key performance indicator (KPI) data, research-based estimates of IAPT sessions per patient, and the budget data. These were compared to Department of Health (DH) Impact Assessment estimates. The analysis suggests a cost per IAPT session of £102.38 for low intensity therapy, and £173.88 for high intensity therapy, compared to DH Impact Assessment estimates of £32.50 and £55.20 respectively. This analysis of cost per session, considered with other factors, raises questions about the original cost benefit claims for IAPT. It replicates a recent research finding that the cost per session exceeds previously reported estimates. In the new NHS commissioning framework, and with the introduction of Any Qualified Provider (AQP) to psychological therapies in primary care, including IAPT, accurate costings and methods of comparing service offers are essential for both commissioners and providers.

Key words: Improving Access to Psychological Therapies (IAPT), mental health, commissioning, costs per session, psychotherapy, primary care.

Introduction

An earlier research paper from the Centre for Psychological Therapies in Primary Care (CPTPC) set the recovery rates of the Improving Access to Psychological Therapies (IAPT) programme in a more robust context than has been commonly presented (Griffiths & Steen, 2013). The paper demonstrated the large variation of recovery rates depending on which key performance indicator (KPI) is used as a denominator. It concludes that the “cases referred” are the most appropriate denominator for commissioning purposes, giving a proportion of cases “moving to recovery” of twelve per cent.

This second paper seeks to estimate IAPT programme costs per session, using research-based estimates of IAPT sessions per patient applied to IAPT KPIs and budget data obtained by FOI request, with reference to Department of Health (DH) Impact Assessment estimates (DH, 2011a) and some recent research findings.

Background

Since 2006, psychological therapies in primary care have undergone fundamental change (DH, 2011b). The IAPT programme has sought to deliver evidence-based therapeutic interventions to people suffering from common mental health problems, principally depression and anxiety disorders. It proposed an outcome-focused methodology, that aimed to reduce the pressure of mental illness on the economy. The service would effectively “pay for itself” through an increased number of people returning to work and a reduction in the use of health care resources (Layard et al., 2006). This is the rationale behind a programme pursued by the last two Governments, which has seen the Coalition Government invest up to £400 million over the four years to 2014–2015 into the IAPT programme (DH, 2012).

The economic case made depends on an accurate means to assess and cost the therapeutic intervention; and an accurate means of benefit assessment of fitness to work, since disqualification from benefit is implicitly equated with recovery. In the past three years, the efficacy of the Department of Work

and Pensions' (DWP) Work Capability Assessment, on which IAPT's "reduced benefit dependency" key performance indicator (KPI 7) depends, has been the subject of severe criticism from many sources including the BMA (British Medical Association, 2013) and leading mental health organisations (Mind, 2013) with one conservative estimate positing more than half a million benefit claimants with limiting illness or disability being wrongly disqualified from benefit, many of them with mental health problems (Griffiths, 2011). This arm of the case for IAPT will be the subject of a further paper from the CPTPC.

As for the programme itself, there has been limited independent scrutiny of its outcome and cost methodology. The DH Impact Assessment of 2011 estimates the cost of high intensity interventions to be £55.20 per session, while low intensity is estimated at £32.50 (DH, 2011a).

More recent analyses of a range of PCTs throughout the East of England suggest the actual cost per session may be around three times higher than these estimates (Radhakrishnan et al., 2013). The Layard report set out a seven-year action plan, which used a cost estimate of a person achieving recovery of around £750 (Layard et al., 2006). However, estimated costs of patients "moving to recovery" in the first wave IAPT sites were estimated to range from £883 to £3,176 for the last quarter of 2009–2010 (Artemis Trust, 2011). In the more up-to-date study of Radhakrishnan et al. (2013), the cost per recovered patient was found to be £1,766.

Seven years on from Layard's widely endorsed proposal, this paper seeks to build on gathering independent scrutiny of the costs of the IAPT programme. In doing so, it aims to begin to answer an urgent need for commissioners to make informed decisions about the psychological therapy services available to them.

Method

In May 2012, a Freedom of Information (FOI) request was submitted to all NHS Primary Care Organisations in England, consisting of 145 Primary Care Trusts (PCTs) and six Care Trusts, to provide the IAPT annual funding sum for each

individual PCT. By September 2012 there were 118 responses in total (a seventy-eight per cent response rate). Some of these responses were provided in the format of PCT clusters, which meant combining the totals of individual PCTs. This and other types of data scrutiny resulted in 108 PCT datasets for analysis. These were judged to be representative.

The annual funding sum incorporates all aspects of the PCT expenditure including, but not limited to, low and high intensity workers, therapists, psychological well-being practitioners, counsellors, IT facilities, administrative staff, clinical service managers, and supervisors. Using this figure, work was undertaken to identify a cost per session estimate for the IAPT programme. No figures were available from published sources for the number of sessions delivered per PCT. Estimates were therefore developed using a combination of sources:

- The North East Public Health Observatory study *Improving Access to Psychological Therapies: a Review of the Progress Made by Sites in the First Rollout Year* (Glover, Webb, & Evison, 2010a).
- The Centre's Freedom of Information request.
- Published key performance indicator data (NHS Information Centre for Health and Social Care, 2013).

The North East Public Health Observatory study analyses the 2009–2010 data for a group of thirty two PCTs.

Overall proportion of low and high intensity sessions derived from the NE Public Health Observatory Study

The first approach uses data extracted from the NE Public Health Observatory Study (Glover, Webb, & Evison, 2010b, Table SS22), which sets out a proportional division of the number of sessions delivered between low intensity, high intensity, and mixed stepped-care. In order to estimate a cost per session value for low and high intensity therapy, these proportions have been applied to the number of patients treated through IAPT in the 108 PCTs where data were obtained by FOI request.

Low intensity, high intensity, and mixed stepped care—a note on definition

Step 1. Assessment, support, and information

Step 2. Low intensity psychological therapies, and guided self-help medication

Step 3. High intensity psychological therapies—several face-to-face sessions

The numbers of sessions derived from this calculation were then added together to provide an estimate of the number of sessions delivered overall. The funding per PCT was then divided by the projected number of sessions delivered, thus:

$$\frac{\text{Annual funding}}{\text{Total number of sessions delivered (Low + high + stepped care intensity)}}$$

Findings—overall proportion of low and high intensity sessions derived from the NE Public Health Observatory Study

Using a breakdown of number of sessions identified for each category of intensity in the NE PH Observatory Study, a total number of sessions in each category was calculated. In the breakdown of sessions, medians are used, following the study's approach.

Table 1: Number of patients deemed to have "completed treatment" in 108 PCTs and their estimated therapy intensity type, derived from the overall proportions found by the NE PH Observatory Study

	<i>Patients "completed treatment" (2011–2012) (KPI 5)</i>	<i>Proportion split from NE PH Observatory</i>	<i>Number of patients receiving therapy type (2011–2012)</i>
	258,942		
Low intensity		48%	124,292
High intensity		31%	80,272
Mixed stepped care		21%	54,378

Source: Glover, Webb, and Evison (2010b), Table SS22

Table 2: Low intensity therapy—estimate of sessions

No. of sessions	Proportion split from NE PH Observatory	Patients (2011–2012)	Session estimate (2011–2012)
1	34.4%	42,757	42,757
3	47.7%	59,287	177,861
7	16.8%	20,881	146,167
11	1.1%	1,367	15,037
Total		124,292	381,822

Source: Glover, Webb, and Evison. (2010b), Table SS22

Note: Some treatment coding is missing for 37.2% of patients. It is assumed that the distribution of session totals for those fully coded also applies to these uncoded patients.

Estimated number of sessions per person in low-intensity therapy: 3.07

Table 3: High intensity therapy—estimate of sessions

No. of sessions	Proportion split from NE PH Observatory	Patients (2011–2012)	Session estimate (2011–2012)
1	29.40%	23,620	23,620
3	34.70%	27,874	83,622
7	24.10%	19,366	135,562
18	11.70%	9,412	169,416
Total		80,272	412,220

Source: Glover, Webb, and Evison (2010b), Table SS22

Note: Some treatment coding is missing for 28.4% of patients. It is assumed that the distribution of session totals for those fully coded also applies to these uncoded patients.

Estimated number of sessions per person in high-intensity: 5.14

Table 4: Mixed stepped therapy—estimate of sessions

No. of sessions	Proportion split from NE PH Observatory	Patients (2011–2012)	Session estimate (2011–2012)
1	30.80%	16,748	16,748
3	40.60%	22,077	66,231
7	22.10%	12,018	84,126
17	6.50%	3,535	60,095
Total		54,378	227,200

Source: Glover, Webb, and Evison (2010b), Table SS22

Note: Some treatment coding is missing for 17.9% of patients. It is assumed that the distribution of session totals for those fully coded also applies to these uncoded patients.

Estimated number of sessions per person in mixed stepped therapy: 4.18

As it is not possible to judge the proportion of those referred who went on to undertake an assessment session, a conservative estimate was developed. According to the IAPT Operating Framework, “Experience to date shows that around 60% of referrals enter treatment”. This would indicate that up to forty per cent of patients are lost between referral and treatment. A proportion of eighty per cent of patients referred being assessed is used below (i.e., midpoint between sixty and one hundred per cent), which is likely to be a more robust estimate of dropout between referral and assessment than the ninety-five per cent used in the Department of Health Impact Assessment (DH, 2011a).

Table 5: Estimate of number of assessment sessions (2011–2012)

Assume % of patients referred who are assessed	80%
Assume no. of assessment sessions per patient assessed	1.0
No. of patients referred (2011–2012)	693,377
No. of assessment sessions estimate (2011–2012)	554,701

Combined estimates

Based on these data, a projected total number of sessions was calculated. Due to the lack of available data within the mixed stepped care ratio split between either being stepped up or down in intensity, a projected estimate was applied using figures from Radhakrishnan et al. (2013). A cost per session estimate was then calculated.

Table 6: Projected number of sessions delivered under the IAPT programme (2011–2012) for 108 PCTs derived from the NE PH Observatory Proportional rates

	No. of sessions— low intensity	No. of sessions— high intensity	Total sessions
Treatment sessions—low	381,882		381,882
Treatment sessions—mixed stepped care as per Radhakrishnan et al. (2013): 18.26% low/81.74% high	41,489	185,711	227,200
Treatment sessions—high		412,220	412,220
Assessment sessions	554,701		554,701
Total number of sessions	978,072	597,931	1,576,003

Using the total number of patients given in Table 1, an overall mean number of sessions per patient was calculated derived from the total in Table 6 above, at 3.94 without the assessment session, and 4.94 including assessment. Using the total number of sessions, a mean cost per session was calculated (Table 7).

Table 7: Cost per session calculated, based on budget figures of 108 PCTs for 2011–2012 obtained by FOI request

<i>Total no. of sessions</i>	<i>Total budget (£)</i>	<i>Mean cost per session</i>
1,576,003	204,119,259	£129.52

Testing the DH Impact Assessment costs per session estimate

The total number of sessions arrived at above was applied to the Department of Health Impact Assessment figure for costs per session to arrive at a figure for total spend implied by the Department's cost per session estimate. As stated in the Impact Assessment:

these are complete costs, reflecting not only the salaries of therapists, but also on-costs to employers (National Insurance contributions and pension contributions), overheads (HR and administration, etc), and capital charges (therapy rooms/office space). (DH, 2011a)

Table 8: Estimate of service costs for the 108 PCTs using estimated costs per session given in DH Impact Assessment Jan 2011

	<i>Low intensity</i>	<i>High intensity</i>	<i>Total service cost</i>
Cost per session (DH Impact Assessment) (£)	32.50	55.20	
Total number of sessions (Table 6 above) (£)	978,072	597,931	
Total cost (using Impact Assessment costs per session) (£)	31,787,340.00	33,005,791.20	64,793,131.20

This implies a level of spend far below budget.

Table 9 shows the cost ratio between budget and spend implied by the DH Impact Assessment.

Table 9: Calculation of multiplier required to uplift service cost based on Impact Assessment costs per session to budget cost

Service cost—budget	£204,119,259.00
Service cost—using Impact Assessment costs per session	£64,793,131.20
Ratio of actual service cost to cost based on Impact Assessment costs per session	3.15

Table 10 applies this ratio to the differential between low and high intensity session costs used in the DH Impact Assessment.

Table 10: Ratio applied to DH estimated session costs to arrive at differential between low and high intensity session costs based on Table 6 sessions breakdown

	Cost per session	
	Low intensity	High intensity
Cost per session (as in DH Impact Assessment)	£32.50	£55.20
Multiplier	3.15	
Estimated <i>actual</i> cost per session	£102.38	£173.88

The estimated cost per low intensity session is £102.38, and that for each high intensity session is £173.88.

Cost ratio of high to low intensity sessions: factors which may affect findings

Radhakrishnan et al. (2013) use sensitivity analysis to assess likely variation of similar findings if the cost ratio of high to low intensity sessions is changed. They use a ratio of 1.8, that is, that high intensity sessions cost 1.8 times the cost of low intensity sessions. This is derived from unpublished financial data from one PCT. They note that “a local tariff” developed for East of England IAPT services arrived at a similar cost ratio (i.e., 1.7) when cost items (salaries and overheads) were considered individually (Nolan, 2009). It should be noted that the ratio used in this paper, derived from the Department of

Health Impact Assessment, is also 1.7. The Radhakrishnan paper goes on to note:

However, this cost ratio does not factor in the time therapists devote to administrative tasks and training. In the tariff estimation, Nolan (2009) assumed that the capacity of psychological well-being practitioners (PWPs), with a possible 9 patient contacts per day, needs to be reduced by 35%, and that of high intensity therapist, with a possible 7 patient contacts, needs to be reduced by 45% to account for these activities. Using these assumptions, the price tariff estimated by Nolan (2009) showed a cost ratio of 2.8.

Sensitivity analysis using low and high cost ratios was performed to see how the results were affected by changing these assumptions. It found that the overall cost per session was not affected by changing the cost ratio: ratios of 1.6, 2, and 2.8 were tested, and an overall cost per session of £138 was not varied. This compares to the finding of £129.52 by the methodology used in this paper, using a much wider range of budget data (108 PCTs) compared to the Radhakrishnan study.

The sensitivity analysis found that the variation in low and high session costs from the base case (1.8), while under eight per cent for the cost of both low and high intensity sessions where ratios of 1.6 and 2 were used, was marked where the ratio of high to low intensity session cost was increased to 2.8. Here, the cost of high intensity sessions increased by 14.6%; and that of low intensity sessions fell by 26.1%. At the same time, as noted, the overall cost per session remained at £138.

It was decided, for the purpose of this paper, not to replicate the sensitivity testing described here, since the overall cost per session finding is not affected. It is judged that it is sufficient to note the other study's findings.

Discussion

Key findings

The analysis suggests a cost per IAPT session of £102.38 for low intensity therapy, and £173.88 for high intensity therapy,

compared to DH Impact Assessment estimates of £32.50 and £55.20 respectively.

Interpretation

This analysis of cost per session suggests higher sessional costs than those envisaged by the Department of Health Impact Assessment. It replicates the finding by Radhakrishnan et al. (2013) that the cost per session exceeds previously reported estimates, although the overall cost per session posited by that study of £138 is higher than this paper's findings of £129.52.

While this paper uses a much wider range of budget data (108 PCTs) compared to Radhakrishnan and colleagues, greater authority is not claimed by this study on those grounds, because of the degree of uncertainty stemming from the interpretation and use of data from a range of sources to arrive at the findings. However, Radhakrishnan and colleagues, did call for replication of their research. While this approach is very different, the finding of overall session costs 3.15 times the DH Impact Assessment supposition strengthens the authority of a conclusion that the Department's assumptions were very optimistic.

This needs to be set beside the Centre's previous paper suggesting a lower proportion of successful outcomes than has been widely claimed, at twelve per cent rather than in excess of forty-five per cent (DH, 2011b). This is not to claim that fewer patients in number are making progress towards recovery through IAPT, but that the denominator of patients referred, rather than patients completing treatment, produces a more meaningful picture of outcomes for commissioners.

In the new NHS commissioning framework, and with the introduction of AQP to psychological therapies in primary care, including IAPT, accurate costings and methods of comparing service offers are essential for both commissioners and providers.

The Centre's current research, "Mental Health's Market Experiment: Commissioning Psychological Therapies through Any Qualified Provider", will be reported later in the year. Early findings indicate that opening up expanded resources to a wider range of providers is having an effect of stimulating

creativity, and that the “pure” model of IAPT is increasingly being diluted as commissioners make pragmatic, evidence-based adjustments to the model. For example, the ratio of high to low intensity activity is being adjusted by commissioners as a matter of policy, sometimes quite radically. Evaluation of outcome and cost-effectiveness from the simple application of CBT envisaged by Layard et al. (2006) may become a thing of the past as evolving services make adjustments that are seen to work well in practice on the ground, particularly addressing the high dropout rate from the original model, and using group therapy which can significantly increase the number of patients reached in new formats not envisaged in the original IAPT configuration.

At the same time, crude measures of economic benefits built on widely criticised work capability assessments (Griffiths, 2010) are likely to be increasingly questioned. Evidence of lower duration of therapy than that assumed by an earlier cost-benefit analysis of IAPT (Layard, Clark, Knapp, & Mayraz, 2007) adds another level of uncertainty to claims of health and economic benefit. It should be noted that this paper posits a mean number of sessions of 3.94 excluding one assessment session, compared to “roughly ten meetings” assumed by Layard and colleagues. The National Audit of Psychological Therapies found that “seventy per cent of patients who had high intensity therapy did not receive the minimum number of treatment sessions that NICE recommends. About one-half of these patients had not recovered by the time that therapy was discontinued” (Royal College of Psychiatrists, 2011).

In a landscape changing yet again, not least in a climate of deteriorating population mental health (Office for National Statistics, 2013) and evaporating social security provision, new, rigorous, and far more evidence-sensitive forms of evaluation will need to be developed, in a context of the massively increased resources achieved by the creators of IAPT. The Centre for Psychological Therapies in Primary Care will work with others to develop these tools.

Limitations

As there has been no direct way to ascertain the number of sessions delivered over the course of the year, the findings

should be interpreted with caution. A number of research sources have been used to construct credible estimates, that are broadly consistent with Radhakrishnan et al. (2013) in their relation to those of the DH Impact Assessment.

Another limitation is that budget figures obtained by FOI request from 108 PCTs are a key part of the methodology. However, budget is not the same as spending out-turn, and there may be inconsistencies in what is included in terms of overheads, and what is not. Radhakrishnan et al. (2013) note the same limitation, and conclude "We do not think variations in overheads like premises and set-up costs will influence cost estimates markedly." However, further work needs to be done using actual historic costs.

Much effort has gone into producing robust estimates of a balance between low and high intensity sessions. However, there are indications from other (continuing) research that this balance is being varied markedly in some areas as a matter of policy. This has implications too for the substance of IAPT, where types of provision appear to be evolving rapidly. This in turn will call for different, probably more sophisticated and sensitive, forms of evaluation beyond simple cost and outcome analysis, as well as reconsideration of the IAPT model and its health and economic impact.

Conclusion

The finding that cost per session is higher than that of the Department of Health Impact Assessment, with a range of other factors discussed above, calls into question the economic case made for IAPT (Layard, Clark, Knapp, & Mayraz, 2007). This replicates a recent research finding that the cost per session exceeds previously reported estimates. This needs to be set beside the Centre's previous paper suggesting an alternative way of presenting outcomes which is appropriate to the needs of commissioners. The method proposed suggests recovery rates lower than those commonly claimed. In the new NHS commissioning framework, and with the introduction of AQP to psychological therapies in primary care, including IAPT, accurate costings and methods of comparing service offers are essential for both commissioners and providers.

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