

**Making the most of HSCIC Quarterly Reports:  
Draft guidance for IAPT service leads and  
commissioners.**

## Introduction

At the start of the IAPT program national reporting was restricted to a small number of key performance indicators (KPI) that had been collected through the omnibus system. Since April 2012 IAPT services have been flowing the full minimum dataset to HSCIC on the understanding that more detailed information will be provided to help services benchmark themselves against others and identify areas for further improvement. It has taken time to build up the HSCIC reporting system. Initially, HSCIC's "experimental statistics" mainly focused on replicating the KPI's. However, a much wider range of indices are now contained in the HSCIC reports, with the greatest detail being found in the quarterly reports and in the second annual report. Further detail will be available in the future. This document aims to help services and commissioners get the most out of the information that is currently available in quarterly reports. The Quarterly report referred to throughout this document is for Q4 of 2013/14. It is the latest report available at the time of writing. A copy of the report with data provided at the level of individual CCGs is embedded in this document. A version organized a provider level is also available from the HSCIC website.

## Access

Several access indicators are available.

*Referrals (KPI3a).* The number of referrals to an IAPT service in the last quarter can be found in Line 1. This data is broken down by age, ethnicity, disability, gender and provisional diagnosis (problem descriptor) in lines 3A-3E.

*Assessment.* The number of referrals that had an initial assessment in the last quarter can be found in the first column of line 4. The remaining columns breakdown this information by how long the patient had to wait for his or her assessment.

*Entering treatment.* The number of referrals that started some form of treatment in the last quarter can be found in the first column of line 5. The remaining columns breakdown this information by how long the patient had to wait for his or her assessment. It should be noted that a patient only has to have one session recorded as "assessment and treat" or "treat" to be counted as "entering treatment". Some individuals who contribute to this count will only have a single session of advice and signposting and will not go on to receive a course of treatment (at least two sessions coded as treatment).

*Finished a course of treatment (KPI5).* The number of referrals that finished a course of treatment during the last quarter can be found in line 8. To be classified as having finished a course of treatment, a referral needs to have received at least two sessions of treatment and to have been discharged from the service (irrespective of whether the therapist considered the patient to have completed a full course of the intended treatment or to have dropped out earlier than expected). The people who've finished a course of treatment are the dataset

that is used to assess recovery, reliable improvement, and a variety of other indices.

### **Service process.**

Currently the main service process indices that are tabulated in the HSCIC quarterly reports concern wait times and duration of treatment (in months). However, in the near future further information such as the number of sessions of treatment received by patients who have finished a course of treatment will be available. In the meantime, it is possible to calculate a number of crucial service process variables from the information already contained in the HSCIC quarterly reports.

*Paired scores data completeness.* The last column in line 9 shows the number of referrals in the last quarter that had finished the course of treatment and had paired scores for both depression and anxiety at the beginning and end of the course. To obtain the ratio of treated cases that have paired scores the number in the last column of line 9 should be divided by the number in the first column (headed "closed cases"). To obtain a percentage figure, the ratio needs to be multiplied by 100.

The national requirement is that the percentage paired scores data completeness must be at least 90%. In 2013/14 Quarter 4 the overall figure for all IAPT services was 96.8% . CCGs ranged from less than 70% to 100%, with the vast majority being over 90%. This is a very impressive achievement.

*Problem descriptor (provisional diagnosis) data completeness.* It is essential that IAPT services are able to identify the problems that they are treating by specifying a provisional diagnosis (ICD-10 code). NICE guidelines are all based on ICD-10 diagnoses so it is impossible to know whether a service is offering the appropriate NICE recommended treatment if it is not recording ICD-10 diagnoses. Similarly, if clinicians have not obtained this information, they cannot know whether they are following NICE guidance. Line 14e shows the recorded ICD 10 codes for all referrals that finished a course of treatment during the last quarter. It is expected that at this stage clinicians should be able to identify the leading ICD-10 problem descriptor for all of the patients they have treated. The percentage of treated patients that have an appropriate ICD-10 problem descriptor can be calculated by using the last three columns (other ICD-10 code, no code provided, and total) in line 14e. There are two ways of doing the calculation, depending on whether one wants to only count "no code" as missing ICD-10 information or count both "no code" and "other ICD-10 code" as missing information. The latter is probably the most appropriate as a therapist who has selected "other ICD-10 code" is not making a positive problem identification as he/she has not indicated that the patient has any of the problems for which IAPT services were created.

If "no code" and " other ICD-10 code" are considered missing values then the percentage problem descriptor data completeness value is:

$$100 * ( \text{"Total"} - ( \text{"no code"} + \text{"other ICD-10 code"} ) ) / \text{"Total"}.$$

The mean problem descriptor data completeness for the last quarter calculated this way is 57.5%, with services ranging from less than 1% to over 98%.

If only "no code" is considered a missing value then the percentage problem descriptor data completeness value is:

$$100 * ( \text{"Total"} - \text{"other ICD-10 code"} ) / \text{"Total"}.$$

The mean problem descriptor data completeness for the last quarter calculated this way is 62.9% with CCGs ranging from less than 1% to over 99%. This metric is important as services with higher completeness rates for problem descriptors tend to have higher overall recovery rates.

#### *Proportion of patients who receive a course of treatment.*

It has long been recognised that a proportion of patients who are referred to IAPT services will have their needs met by a single session involving a person-centred assessment and advice or signposting. However, as the main aim of the IAPT programme is to increase public access to psychological therapy, one would expect an IAPT service to provide the majority of the people that it sees with a course of treatment (defined as two or more sessions involving treatment). It is possible to *estimate* the approximate proportion of patients who receive a course of treatment by dividing line 8 ("number of referrals that ended in the quarter having finished a course of treatment") by the first column of line 5 (number entering treatment in the same quarter). The latter only requires an individual to have at least one session, whereas the former requires a minimum of two sessions before discharge. Multiplying the ratio by 100 gives the percentage figure.

In the last quarter nationally 51.6% of patients who were seen in IAPT services received a course of treatment (CCG level range <20% to >70%). The remainder either only had one session or if they had multiple sessions the case was not closed and so it could not be assessed in terms of whether recovery had, or had not, occurred. Services that consistently run high percentage figures for either category would appear to be problematic.

### **Outcome**

At the start of the IAPT programme the only national measure of outcome was "recovery". However, it was soon recognised that a range of indices were required to properly capture the nature of clinical outcomes. The HSCIC quarterly reports now contain four such indices, each derived from the combined depression (PHQ) and anxiety (GAD/ADSM) measures. Information on changes in employment and change the medication is also reported.

*Recovery* is said to have occurred if an individual who has finished a course of treatment, was a "case" at the start of treatment, and was "not a case" at the end

of treatment. Individuals are considered to meet the criteria for caseness if they score above the clinical threshold on the depression and/or the anxiety measure. Individuals are considered to meet the criteria for non-caseness if they score below the clinical threshold on both depression and anxiety. Line 15 shows the number of individuals who recovered in the last quarter. It is traditional to express this value as a percentage of all those individuals who finished a course of treatment during that period and were cases at the start of their treatment. The calculation for percentage recovery is as follows:

$$\% \text{ recovery} = 100 * (\text{line 15})/(\text{line 8} - \text{line 16}).$$

In Quarter 4 of 2013/14 the national recovery figure was 44.9%, with CCGs ranging from less than 30% to over 70%. The figures for the whole of 2013/14 can be found in Table 10C of HSCIC's 2<sup>nd</sup> Annual Report on IAPT services which was published on 17<sup>th</sup> September 2014 (see HSCIC website).

*Reliable Recovery.* All questionnaires have measurement error. If a change in symptom scores between pre-and post treatment is small it may not exceed the measurement error of the questionnaire and so cannot be considered to be real. On the PHQ a change of at least six points as required for the change to be considered reliable. On the GAD a change of at least four points as required. The reliable recovery index takes into account measurement error by only classifying an individual as recovered if he or she has shown a reliable improvement on the depression or anxiety measure with either the same or no change on the other measure AND has moved from caseness to non-caseness. Line 18 shows the number of individuals who reliably recovered in the last quarter. To express this number as a percentage of all individuals who finished a course of treatment during the quarter and were cases at the start of their treatment, the following formula should be applied:

$$\% \text{ Reliable recovery} = 100 * (\text{line 18})/(\text{line 8} - \text{line 16}).$$

In Quarter 4 of 2013/14 the national reliable recovery figure was 42.6%. In most CCGs the reliable recovery rate was around 2% lower than the recovery rates, indicating that most people who were classified as recovered had also shown reliable improvement. However, in a few CCGs the discrepancy is quite a bit larger (>5%), suggesting that the services in these CCGs were seeing a significant number of people whose scores were just slightly above the clinical threshold at pre-treatment and had moved only a small and unreliable amount downward to below the clinical threshold at post-treatment. (The % reliable recovery figures for the whole of 2013/14 are in Table 10C of the 2<sup>nd</sup> IAPT Annual Report).

*Reliable improvement.* When the IAPT programme only reported recovery rates some commentators incorrectly assumed that patients who had not reached full recovery criteria had failed to obtain any benefit from treatment in IAPT. It was clear that an index that detected improvement that fell short of full recovery was required. The reliable improvement measure fulfils this requirement. Patients are considered to have reliably improved if their depression or anxiety score has

dropped by a reliable amount between pre-and post treatment and their score on the other measure has either also shown a reliable reduction or has shown no reliable change in either direction. Line 17 reports the number of patients that showed a reliable improvement once they had finished a course of treatment. Currently HSCIC also reports on a monthly basis the percentage of patients that showed reliable improvement. It is important to understand for this calculation the denominator is the total number of people who had finished a course of treatment in the relevant period, not just the number of people who had finished a course of treatment having being classified as cases at the start of treatment. This means that the formula for calculating reliable improvement from the quarterly HSCIC Excel spreadsheet is as follows:

$$\% \text{ reliable improvement} = 100 * (\text{line 17, column 1}) / (\text{line 8}).$$

In Quarter 4 of 2013/14 the national reliable improvement rate was 59.8%. CCGs can check their own value by running the formula on their own data. (The CCG level % reliable recovery figures for the whole of 2013/14 are in Table 10C of the 2<sup>nd</sup> IAPT Annual Report).

*Reliable deterioration.* Psychological therapies have the potential to be harmful, as well as helpful. For this reason, HSCIC also reports the number of patients who have shown a reliable deterioration in their symptom scores between pre-and post treatment. Patients are considered to have reliably deteriorated if there depression or anxiety score has increased by a reliable amount between pre-and post treatment and their score on the other measure has either shown a reliable increase although shown no reliable change in either direction. The formula for calculating reliable deterioration from the quarterly HSCIC Excel spreadsheet is as follows:

$$\% \text{ reliable improvement} = 100 * (\text{line 17, column 3}) / (\text{line 8}).$$

In Quarter 4 of 2013/14 the national reliable deterioration rate was 6.2%. Rates of this magnitude and higher are observed on wait lists in randomized controlled trails so this value does not seem to be a concern at a national level. However, CCGs and services should look at their own reliable deterioration rates to see if they are appreciably higher. If that was the case, there would be a concern that some patients may be getting worse as a function of treatment. Careful further investigation would be required.

*Difference between % recovery and % reliable improvement.* In a well-functioning service one would expect the % reliable improvement figure to be substantially higher than the % recovery figure because a fair number of patients with severe problems might be expected to show reliable improvement even if they haven't fully recovered. If the difference is small, or negative, it is likely that the service is seeing a substantial number of patients that are non-cases at the beginning of treatment and/or have moved unreliably across the case/non-case threshold.

## Outcome Broken Down by Provisional Diagnosis

In randomized controlled trials the recovery rates that can be achieved with the latest NICE recommended treatments vary depending on the problem being treated. Until recently a breakdown of recovery by diagnosis was not available so CCGs and services could not check whether they were obtaining the recovery rates that might be expected. However, HSCIC have published the relevant information in Tables 12 and 13 of the 2<sup>nd</sup> Annual Report and will also do so in their quarterly reporting, starting in January 2015.

Inspection of the recovery by diagnosis data in the 2<sup>nd</sup> Annual Report reveals some important themes at a national level. CCGs may wish to check whether similar or different themes are evident in their own data.

*Obsessive-compulsive disorder.* The recovery rates for OCD (49%) are above the IAPT average, the average number of sessions (9) is the highest in IAPT, and almost all identified therapy is in line with NICE guidance. It therefore appears that the treatment of OCD in IAPT is good. However, only 1.8% of IAPT cases have a diagnosis of OCD and in some CCGs almost nobody with OCD is offered treatment. There is therefore a need to increase access to a treatment programme that is effective.

*Phobias, Generalized Anxiety Disorder, Somatoform Disorders, & Panic Disorder.* In randomized controlled trials of CBT the recovery rates for these disorders are greater than the typical recovery rates for depression. It is reassuring that this is also observed in the IAPT dataset (Figure 14) and that in most of the conditions treatment is in line with NICE guidance (Table 6b). However, as in the first year of the IAPT programme, there is a fair amount of inappropriate use of counseling for treating generalized anxiety disorder (GAD). This is a problem because analysis of the first year data (Gyani et al, 2011) showed that counseling is associated with lower recovery rates in GAD than CBT. For phobias and panic disorder, figure 8 shows that far fewer patients with these conditions receive treatment than one would expect given the epidemiology. So, it seems we are again under-accessing conditions for which IAPT is highly effective.

*Agoraphobia.* This is also a condition where high recovery rates are achieved in RCTs. However, unlike with the anxiety disorders mentioned above, the IAPT recovery rate of 37% (figure 14) is well below expectation. Reasons for this will need to be explored. One possibility is that some IAPT services may discourage therapists from leaving the office to do “behavioural experiments / exposure assignments” in the outside world with their clients. Such exercises are crucial for the successful treatment of agoraphobia.

*Posttraumatic stress disorder.* The IAPT national recovery rate for PTSD is 36%, which is well below that achieved in randomized controlled trials (60-80%). Reasons for this discrepancy need to be explored. Part of the explanation might be the extensive use of treatments not recommended by NICE (see Table 6b), such as low intensity interventions and counseling. As with the other anxiety

related disorders, the condition is also under-represented in the number of cases entering treatment.

*Social anxiety disorder.* This is one of the big success stories of recent psychotherapy research. The first line treatment recommended by NICE (individual specialized CBT) achieves high recovery rates (60-80%) in RCTs and in routine audits of specialist clinics. However, the IAPT recovery figure (44%) is below average. Reasons for this will need to be explored with the services. One possible explanation might be the use of low intensity interventions. NICE states these should not be used with social anxiety disorder, however, Table 6b shows they are commonly used for social anxiety disorder in IAPT. Another problem might be the lack of appropriate equipment for the video feedback that is a central part of the treatment or difficulties in conducting therapy outside of the clinic in realistic social situations.

### Conclusion

This document has outlined ways in which the data published by HSCIC in its quarterly reports and in the 2<sup>nd</sup> Annual Report can be used by services and commissioners get a nuanced view of the strengths and weakness of their own services. It is hoped that they will find the information helpful as they work to build on the successes that have already been achieved by the IAPT programme.

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