iapt
Improving Access to Psychological Therapies

NHS England

Improving Access to Psychological Therapies

Measuring Improvement and Recovery Adult Services

Version 2

Document Version Control

Version	Date	Author	Key Changes
1.0	May 2014	Professor David Clark Margaret Oates	First released
2.0	June 2014	Professor David Clark Margaret Oates	Changes made to reliable change table page 7

Introduction

The IAPT programme was established in 2008 in order to improve access to Psychological Therapies for people with Depression and Anxiety Disorders. The NHS Mandate commits NHS England to playing "a full part in delivering the commitments that at least 15% of adults with relevant disorders will have timely access to services, with a recovery rate of 50% by 2015".

From April 2012 services have been required to submit a patient level data set centrally. This is a new return as such data quality issues need to be worked through however it will in the near future provide an opportunity to conduct sophisticated analyses that can look at a number of ways of measuring improvement and recovery, and can identify lessons that will inform service development.

Calculating Recovery in IAPT

IAPT uses a number of well-validated, patient completed questionnaires to measure change in a person's condition. Most of the questionnaires are administered at each appointment, making it possible to track improvement by comparing scores over time. Research studies have identified cut-off scores that indicate whether a person's symptoms are sufficiently severe to be considered a clinical problem (caseness). The IAPT Programme has collected Key Performance Indicators (KPIs) since 2008, these include a measure of recovery (KPI 6) which use questionnaire scores as follows:

- Moving to recovery: This counts the number of people that were above the clinical cut-off before treatment but below following treatment. IAPT looks at change in a person, not just in a syndrome. For this reason, an individual is defined as a case if (s)he scores above the clinical threshold on depression *and/or* anxiety at pre-treatment. Recovery occurs if that person subsequently scores below the clinical threshold on depression *and* anxiety.

This has been a useful measure of patient outcome and has helped to inform service development. However using this methodology means borderline cases who only show a very small change will be counted if they move across the threshold whereas more severe cases who show significant improvement but do not pass the cut-off will be excluded. Therefore simply looking at movement across the threshold introduces a perverse incentive to 'cherry pick' simple cases who may have improved even without intervention. For this reason IAPT has developed complimentary measures that allow us to understand better the benefit people get from treatment.

All questionnaires have a degree of measurement error, which can be quantified. If an individual changes by an amount that exceeds the measurement error of the scale, they are considered to have shown reliable change. By adopting the concept of reliable change we are able to improve our metrics by only giving credit to change that is real. Two useful binary classifications can be created using the concept of reliable change, Annex 1 shows all the questionnaires used in IAPT and their associated properties:

- Reliable improvement: This counts the number of people where pre and post treatment scores exceed the measurement error of the questionnaire.
- Reliable Recovery: This counts the number of people where pre and post treatment scores exceed the measurement error of the questionnaire *and* their score moves below the clinical cut-off.

Reliable recovery and reliable improvement measures provide important information. The former tells us how many people have shown a real movement in symptoms large enough to warrant the judgement that the person has recovered. The latter tells us how many people have shown any degree of real improvement. The IAPT year one audit (Gyani et al) reported reliable recovery rate at 40% and the reliable improvement at 64%.

Reliable Improvement

Reliable improvement requires that any improvement in scores on the appropriate outcome measures between pre and post treatment exceeds the measurement error of the scales. Conversely, reliable deterioration requires that any deterioration in scores on the appropriate outcome measures between pre and post treatment exceeds the measurement error of the scales. IAPT looks at change in a person, rather than just a syndrome. For this reason, the reliable improvement/deterioration classification is based on changes in both depression and anxiety. Reliable improvement is a variable that contributes to the calculation of reliable recovery but can also be reported on its own when one is interested in assessing how many people showed any degree of real benefit while being treated in an IAPT service. Table 1 above shows how reliable improvement/deterioration is calculated from the conjunction of depression and anxiety scores.

Change in	**Depression Score (PHQ9)**	**Anxiety Score (GAD7 or other relevant ADSM)**
Improvement		
	Reliable Reduction	Reliable Reduction
	Reliable Reduction	No reliable change
	No reliable change	Reliable Reduction
No Change		
	No reliable Change	No reliable Change
	Reliable Reduction	Reliable Increase
	Reliable Increase	Reliable Reduction
Deterioration		
	Reliable Increase	Reliable Increase
	Reliable Increase	No reliable change
	No reliable change	Reliable Increase

Table 1: reliable improvement/deterioration based on depression and anxiety scores

R**eliable Recovery**

This measures reliable improvement but the case must also move below the caseness threshold on all measures at the end of treatment. This means that minor, unreliable reductions in symptoms that cross the clinical/non-clinical boundary will not be classified as (reliable) recovery. Gyani et al (2013) looked at the impact of moving from KPI 6 to reliable recovery. On average, there was only a 2% drop in recovery percentage rates when reliable change was part of the calculation.

Way Forward

1. **The NHS Mandate** commits to a recovery rate of 50% by 2015. Throughout 2014/15 performance will be measured against the 'moving to recovery' definition. This preserves the time series from the start of the programme and allows time to test new indicators and to ensure that they can be calculated accurately at a national level. The Gyani et al (2013) report identified a range of service characteristics that are associated with high service level recovery rates. Clinical leads and commissioners may like to review their provision in the light of these findings. A copy of the Gyani at al report can be downloaded from the IAPT website. .

2. **IAPT National Reporting:** The HSCIC have been commissioned to publish experimental reports from the IAPT data set on a quarterly basis. This publication includes reliable improvement and reliable recovery reported by Provider and CCG.

3. **Future Developments**: Counting cases that show reliable improvement as well as those that show reliable recovery, is a step in the right direction in the sense that it gives credit for improvement that is real but falls short of full recovery. However, it doesn't show the extent to which someone has reliably moved towards recovery. For example:

   Case 1 pre-treatment score on PHQ is 26 post treatment 20 = reliable improvement
   Case 2 pre-treatment score on PHQ is 26 post treatment 14 = reliable improvement

   Using the above methodology both cases would be credited the same even though case 2 has improved substantially more and is far closer to recovery. A further enhancement would be to quantify the extent of the improvement in individuals who have shown reliable change but have not fully recovered. Work is underway to define an indicator that will attribute proportional credit determined by how far the person has moved towards reliable recovery. This will form the basis of the IAPT Recovery indicator in the **NHS Outcomes Framework** and the **CCG Outcomes Indicator Set (CCG OIS)** and expected to be implemented later this year.

   NHS Outcomes Framework '3.1 Total health gain as assessed by patients for elective procedures: Psychological therapies'
   and
   CCG OIS 'C2.11 & C2. 12. Recovery following talking therapies (all ages and older than 65)'

Summary

1. The NHS Mandate commitment to reach 50% recovery by 2015 will continue to adopt the tradition 'moving to recovery' measure in order to preserve the time series from 2008.

2. Where more than one index of improvement is permitted reporting of reliable recovery rates, and reliable improvement rates (and perhaps reliable deterioration rates) gives a fairer picture of the benefits of being seen in an IAPT service than the current KPI 6 derived recovery rate.

3. Therefore the direction of travel is to move towards using these more reliable measures of recovery. Reliable Improvement and Reliable recovery will be published in HSCIC reports at Provider and CCG level.

4. Work is on-going to develop a single index that will apportion credit for full recovery and also proportional credit for reliable improvement along the way to recovery. This will form the basis of the IAPT Recovery indicator in the **NHS Outcomes Framework** and the **CCG Outcomes Indicator Set** and expected to be implemented later this year.

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Annex 1: Questionnaires used in IAPT and their associated properties

A - Measure	B -Diagnosis	C-Range	D -Reliable change index	E -Caseness threshold
PHQ-9	Depression disorders	0-27	≥ 6	≥ 10
GAD-7	Generalised anxiety disorders (and unspecified anxiety problems)	0-21	≥ 4	≥ 8
Anxiety Disorder Specific Measures (ADSM)				
SPIN	Social Anxiety Disorder	0-68	≥10	≥ 19
IES-R	Posttraumatic Stress Disorder	0-88	≥ 9	≥ 33
MI	Agoraphobia	1-5	≥ 0.73	2.3 per item average
OCI	Obsessive-compulsive disorder	0-168	≥32	≥ 40
sHAI	Health Anxiety (short version: 14 items)	0-54	≥ 4	≥ 18
PDSS	Panic Disorder	0-28	tbc	≥ 8

Table 2: reliable change categories