Why IAPT services need to use Anxiety Disorder Specific Measures (ADSM) to guide treatment and assess the overall outcome of a course of therapy.

Background

IAPT services use a unique session by session outcome monitoring system to guide clinicians' choice of procedures in each treatment session and to assess the overall outcome of a course of therapy.

As most patients who are seen in IAPT services have significant symptoms of both depression and anxiety, we require therapists to give both types of measure every time a patient is seen. Recovery is judged to have occurred if an individual drops below the clinical threshold for *both* the depression and the anxiety measure at the end of treatment.

The PHQ-9 is used as the depression measure for all patients. The GAD-7 is the default measure for anxiety. However, it was originally developed as a measure of generalised anxiety disorder and has the limitation that it does not include any items covering the specific pathology of social phobia (avoidance of social situations), agoraphobia (avoidance of the agoraphobic cluster of situations), obsessive-compulsive disorder (obsessions & compulsions), panic disorder (panic attacks) , or post-traumatic stress disorder (intrusive memories and avoidance of trauma reminders). For this reason, national IAPT guidance from 2010 onwards has recommended that clinicians also administer a well-validated measure that is specific to the symptoms of these particular disorders, if they are the main focus of treatment. NHS digital is instructed to use the PHQ-9 and the relevant ADSM to calculate recovery and reliable improvement if the ADSM has been administered. If it is missing, recovery is calculated using the PHQ-9 and the GAD-7.

Under-use of ADSMs

NHS Digital provided information on the extent to which ADSMs are being used in Table 6b of the 4th Annual IAPT report (October 2016). Only a minority of patients with specific anxiety disorders have paired scores on the relevant ADSM. The exact rates are: obsessive-compulsive disorder (20.5%), social phobia (17.5%), agoraphobia (1%), panic disorder (6%), and PTSD (22%). So, scarcely more than 1 in 5 patients had an appropriate measure of their anxiety disorder, and for some conditions the rate was much lower. In the period covered by the report (2015/16), this means that around 40,000 patients with these disorders will have been coded as recovered or not using the combination of the PHQ/GAD, rather than the combination of PHQ/ADSM. It seems likely that these patients will not have benefited from treatment as much as those who were given the ADSMs as their therapist would have been missing critical information to guide therapy. In addition, there is a concern that recovery rates may have been over-estimated as some patients who drop below the threshold on GAD-7 may still be well above the threshold on the relevant ADSM. This seems particularly likely for phobias as it is generally accepted that it is easier make people less anxious in situations that they often enter, but it is more difficult to get them to extend their range and fearlessly enter situations that they normally avoid.

Does it matter?

To investigate whether a failure to use ADSMs might be giving us an excessively rosy picture of recovery from specific anxiety disorders in IAPT services, I accessed the datasets from two recent RCTs conducted by my group. One focused on moderate to severe cases of social phobia and the other focused on moderate to severe cases of PTSD. Both compared different ways of delivering cognitive therapy (CT). The different delivery systems (face-to-face only, internet or other self-study assisted treatment) achieved similar outcomes, so the data is combined. For both conditions I looked at the subset of patients who met caseness criteria at pre-treatment on *both* PHQ/ADSM and PHQ/GAD and calculated recovery rates using both criteria at mid-treatment (6-7 sessions), post-treatment (12-14 sessions) and 3-month follow-up. I also plotted work and social adjustment (WSAS) scores to see how patient's self-rated disability changed during treatment.

Social Phobia (n=62)

Occasion	**WSAS**	**PHQ/SPIN Recovery**	**PHQ/GAD Recovery**
Pre-treatment	3.56	0%	0%
Mid (6-7 sessions)	2.44	27.4%	71.0%
Post (12-14 sessions)	1.69	63.0%	87.0%
Follow-up	1.48	72.6%	83.9%

The recommended ADSM for social phobia is the SPIN. By the end of a course of cognitive therapy an impressive 63% of patients have recovered on both the SPIN and PHQ. Their ratings of disability have also shown a large drop. However, after only 6-7 sessions/weeks the recovery rate is a much more modest 27% and disability remains high. Clearly, patients need the full course of treatment (12-14 sessions) to have their lives transformed. However, if a therapist was only using the PHQ/GAD this would not have been spotted and it is very likely that patients would have been discharged too early as their recovery rates on the PHQ/GAD after half a course of treatment already look very good (71%). This suggests that for social phobia relying on the PHQ/GAD and not using the SPIN is likely to lead to under-treatment and over-optimistic estimates of recovery rates.

There is an additional problem. Around a third of patients who met initial caseness criteria on the PHQ/SPIN did not meet caseness criteria on the PHQ/GAD. These patients did very well in treatment (see below) but would not have been picked up as cases if a service was not using the SPIN. As a consequence, the service would get no credit for treating them effectively.

Patients (n=37) who only met caseness criteria on the PHQ/SPIN at pre-treatment (mainly because their initial PHQ scores were less than 10)

Occasion	**WSAS**	**PHQ/SPIN Recovery**
Pre-treatment	2.56	0%

Mid (6-7 sessions)	1.55	40.5%
Post (12-14 sessions)	1.09	81.1%
Follow-up	1.08	81.1%

PTSD (n= 76)

Occasion	**WSAS**	**PHQ/IES Recovery**	**PHQ/GAD Recovery**
Pre-treatment	4.44	0%	0%
Mid (6-7 sessions)	3.37	47.2%	48.6%
Post (12-14 sessions)	2.32	69.4%	69.4%
Follow-up	1.91	78.6%	77.1%

The recommended ADSM for PTSD is the Impact of Events Scale (IES). Comparisons between recovery rates calculated using the PHQ/IES combination and the PHQ/GAD combination suggest, unlike in social phobia, the PHQ/GAD combination does not over-estimate recovery. The Maudsley Centre for Anxiety Disorders and Trauma (CADAT) data shows a similar pattern. However, table and CADAT's data are for a course of therapy delivered by therapists who had the benefit of seeing the IES each session and were able to use it to help plan the content of their sessions. IAPT therapists who fail to give the IES will not have this benefit, which may partly explain why their recovery rates (however assessed) are considerably lower than in the Table.

Further data

Staff at my old clinic in South London (The Centre for Anxiety Disorders and Trauma at the Maudsley Hospital) kindly agreed to investigate whether the combination of PHQ/ADSM and PHQ/GAD give similar or different recovery rates in three anxiety disorders that they see frequently and for which their therapists usually give all three measures (PHQ, GAD & ADSM). The clinic is part of the Lambeth, Lewisham and Southwark IAPT services. The Table below shows the findings.

Condition	**Sample size**	**PHQ/ADSM Recovery rate**	**PHQ/GAD Recovery rate**
Social Phobia	72	44.4%	68.1%
PTSD	59	37.3%	40.0%
OCD	69	63.7%	59.4%

The South London data confirms the findings from our clinical trials. Calculating recovery using the PHQ/GAD gives a higher rate that using the PHQ/ADSM for social phobia but not for PTSD. It also does not seem to be a problem in OCD. We don't have data on agoraphobia but my guess is that agoraphobia data would look like the social phobia data as avoidance of feared situations is central to each disorder and is not assessed by the GAD.

Where to next?

Data from clinical trials and the South London Centre for Anxiety Disorders and Trauma are consistent. Failure to use ADSMs is likely to be having a negative impact on the treatment of some anxiety disorders, particularly those characterized by extensive situational avoidance.

In the coming year we need to have a particular focus on ADSMs and to help services to get into the habit of using them for treatment planning and recording outcomes. We can do this in multiple ways.

- *Modify our IT systems*. I have had extensive discussions about ADSMs with clinical leads in the Thames Valley (15 CCGs). They understand the importance of ADSMs and intend to encourage their therapists to consistently use ADSMs to plan treatment and assess outcome. However, they have all mentioned that IAPTus and PC-MIs as currently configured do not encourage the use of ADSMs. They have mentioned two key issues and have suggested way in which they could be finessed.
    - **Failure to flag the ADSMs and/or require their completion**. PC-MIS flags that a particular ADSM is recommended if the relevant problem descriptor is present. However, unlike for the PHQ-9 or GAD-7, completing the field for that measure (with a score or an indication that the measure was not given) is not mandatory. IAPTus does not flag that an ADSM should be used when a relevant problem descriptor has been selected. *Clinical leads have indicated that modifying PC-MIS and IAPTus so that they both flag up the need for a particular ADSM and make entry of the ADSM mandatory would be a great help*.
    - **Lack of support for ADSMs in pre-session digital options for data entry.** PC-MIS and IAPTus both now have systems that allow patients to complete symptom questionnaires online before they attend a therapy session. These are a great advance. However, neither supports the completion of ADSMs. Clinical leads have indicated that therapists would find it immensely helpful if the online portal (PC-MIS) / e-mail questionnaire system (IAPTus) signals the need for an ADSM to be completed
- *Educate therapists about the value of ADSMs*. We have started to do this in national workshops. We can ask trainers to incorporate ADSMs into their training programmes.
- *Report CCG level use of ADSMs*. We could include a measure of the use of ADSMs in NHS Digital's quarterly reports and highlight CCG level performance in the PHE Common Mental Health Disorders. This will raise awareness of the issue among commissioners, as well as service leads. Els Drewek has suggested a simple measure: the percentage of cases that had a relevant anxiety disorder as their problem descriptor, and had paired scores on the appropriate ADSM after finishing a course of treatment. Data would be aggregated across all relevant anxiety disorders so there were enough cases per CCG to justify quarterly reporting.
- *Ensure that all internet therapy programmes that are included in the IAPT digital pilot evaluation automatically collect an ADSM, if one is relevant*. This needs to be part of the NICE initial scrutiny process.

- *Produce a "What to expect from your treatment"* document that could be given to all patients when they start treatment in an IAPT service. It would include a statement that they could expect a comprehensive assessment that collaboratively identifies the main problem(s), explains what the NICE recommended treatments for each problem involve and gives a list of the measures they should expect to be given, based on their clinical condition.

Are our existing estimates of IAPT recovery rates over-optimistic?

Around 80% of people with social phobia are not given the relevant ADSM. It seems fairly clear that IAPT is likely to be overestimating its success with these people, not least because the PHQ/GAD combination is likely to mislead therapists into stopping treatment earlier than appropriate. The same probably applies to agoraphobia where over 95% of cases are not given the relevant ADSM. The data are more reassuring for OCD and PTSD were recovery rates are similar when calculated with PHQ/ADSM or PHQ/GAD.
At the moment social phobia and agoraphobia are greatly under-represented in IAPT. Of the 537,131 patients who finished a course of treatment in 2015/16 only 9,739 had social phobia as their primary problem, and only 2,969 had agoraphobia as the primary problem. If we assume that using the PHQ/GAD over-estimated recovery rates for these individuals by around 50% (as suggested by the data above), then we reported around 1,700 too many recoveries in 2015/16. This would mean that the real national recovery rate would be over-estimated by around 0.75 percentage points, So, not a big problem at the moment. But it will become a bigger issue if we improve access to treatment for people with social phobia and agoraphobia, while not ensuring that clinicians use the right measures for these conditions.

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Appendix 1.

Table of IAPT's Core Outcome measures

Main Mental Health Problem (primary problem descriptor)	**Depression Measure**	**Other Recommended Symptom Measure (ADSM/MUS)**	**Back-up to "Other Recommended Symptom Measure" for calculating recovery if other recommended measure is missing**	**Measure of Disability**
Depression	**PHQ-9**	**GAD-7**		WSAS
GAD	**PHQ-9**	**GAD-7**		WSAS
Mixed anxiety/depression	**PHQ-9**	**GAD-7**		WSAS
No problem descriptor	**PHQ-9**	**GAD-7**		WSAS
Social anxiety	**PHQ-9**	**SPIN**	GAD-7	WSAS
PTSD	**PHQ-9**	**IES-R**	GAD-7	WSAS
Agoraphobia	**PHQ-9**	**MI**	GAD-7	WSAS
OCD	**PHQ-9**	**OCI**	GAD-7	WSAS
Panic Disorder	**PHQ-9**	**PDSS**	GAD-7	WSAS
Body Dysmorphic Disorder (BDD)	**PHQ-9**	**To be agreed by IAPT's Education & Training Committee**	GAD-7	WSAS
Irritable bowel syndrome*	**PHQ-9**	**Francis IBS scale**	GAD-7	WSAS
Chronic fatigue syndrome*	**PHQ-9**	**Chalder Fatigue Questionnaire**	GAD-7	WSAS
MUS not otherwise specified*	**PHQ-9**	**PHQ-15**	GAD-7	WSAS

Note: Recovery, reliable improvement and reliable deterioration rate calculations are based on the should be based on the pair of measures highlighted in bold. When the measure in bold in the third column is missing, the recovery calculation is based on the combination of PHQ-9 and GAD-7, if this is different.