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**TITLE**

Experiences of outcome monitoring in service users with psychosis: Findings from an Improving Access to Psychological Therapies for people with Severe Mental Illness (IAPT-SMI) demonstration site

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## **Abstract:**

**Objectives:** Psychological therapy services are increasingly required to instate Routine Outcome Monitoring (ROM), to demonstrate the clinical and economic impact of interventions. Professionals' views of ROM are an acknowledged barrier to implementation. Service user perspectives have rarely been examined, but acceptability and perceptions of ROM are critical to successful implementation. We investigated service users' experiences of ROM in an Improving Access to Psychological Therapies for people with Severe Mental Illness psychosis demonstration site.

**Design:** ROM comprised a periodic assessment battery completed at baseline, mid-therapy and end-of-therapy and a single measure completed session-by-session. Quantitative and qualitative feedback was sought at each periodic ROM administration, and, for sessional ROM, at mid-therapy and end-of-therapy. Demographic and clinical correlates of satisfaction were examined cross-sectionally at baseline. Consistency of satisfaction over time and associations of satisfaction with engagement were examined longitudinally.

**Methods:** Service users rated baseline (n=281/289), mid-therapy (n=114/121), end-of-therapy (n=124/154), and session-by-session (mid-therapy n=63/87 and end-of-therapy n=90/123) ROM from 0 ('extremely unhelpful') to 10 ('extremely helpful') and gave qualitative feedback.

**Results:** Service users predominantly found ROM helpful (score 6-10; 64%-72%) or neutral (score 5; 19%-29%). Finding ROM less helpful was associated with younger age and poorer general outcomes, but not with psychotic symptoms or therapy drop out. Emerging qualitative themes included feeling understood, valuing opportunities to reflect, expressing feelings and tracking progress towards goals. Shorter batteries would be preferable, particularly for younger respondents, and those with poorer outcomes.

**Conclusions:** ROM is acceptable for people with psychosis. Tailoring assessments to specific subgroups should be considered.

### Practitioner points:

- Routine outcome monitoring for psychological therapy is acceptable to people with psychosis
- Most respondents experienced outcome monitoring as an opportunity to feel understood
- Younger people and those with poorer functioning and wellbeing might be at higher risk of dissatisfaction
- Short assessment batteries and less frequent outcome monitoring might be preferable for some service users

### Limitations of the study:

- Feedback about session-by-session outcome monitoring was not contemporaneous with completion, and may be subject to memory or other biases.
- Only two-thirds of service users provided feedback about session-by-session ROM (compared to >94% for periodic ROM) so findings may not be fully representative.
- Feedback about measures was not provided anonymously and it is possible that service users were reluctant to express criticism about ROM to the assessor

Keywords: schizophrenia; routine outcome monitoring; service user feedback; Cognitive Behaviour Therapy;

Family Intervention

## INTRODUCTION

Routine outcome monitoring (ROM) is commonly used to monitor performance and improve quality in publicly financed services, such as healthcare (Young, Grusky, Jordan, & Belin, 2000). The Department of Health in England recommends the use of patient-reported outcome monitoring in addition to clinician-rated measures (DH, 2010). Identified implementation challenges include financial and time constraints, conflicting stakeholders' needs and clinicians' misgivings (Boswell, Kraus, Miller, & Lambert, 2015). Feared iatrogenic consequences of outcome monitoring include the impact on the therapeutic relationship and burden of measure completion for service users (Wolpert, 2014). For people with psychosis in particular, the selection of routine outcome measures (ROMs) warrants careful attention (Peters et al., 2015), given well-reported difficulties engaging this client group (Johns et al., 2013; Garety & Rigg, 2001) and the potential mismatch between service user and therapist-defined outcomes (Shepherd, 1995).

In the United Kingdom, ROM is a key feature of the Improving Access to Psychological Therapies (IAPT) programme for people with Common Mental Illness (anxiety and depression) (Clark et al., 2009), that has recently been extended to people with psychosis, bipolar and personality disorders (Severe Mental Illness, IAPT-SMI, <http://www.iapt.nhs.uk/smi-/>; Department of Health, 2012). Routine outcome measures are used every session in IAPT to monitor therapy effectiveness, improve quality, and inform commissioning.

Difficulties with sustaining engagement and collecting paired outcomes<sup>1</sup> in psychosis initiatives (Fisher et al., 2008), suggest that session-by-session ROM may be especially useful for this group, as it ensures paired outcomes are available even for those disengaging before therapy ends. However, the burden of completion, in the context of potential difficulties with attention and motivation (Hahn et al., 2012; Schlosser et al., 2014), and emotional sensitivity to negative content (Garety, Kuipers, Fowler, Freeman, & Bebbington, 2001; Myin-Germeyns, Van Os, Schwartz, Stone, & Delespaul, 2001), may present particular issues of acceptability and feasibility.

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<sup>1</sup> Paired outcome here refers to two measurements from the same individual across time during the course of therapy.

Service user experiences of ROM in psychological therapy have rarely been investigated (Kilbride et al., 2013), but emerging evidence suggest that outcome measures are generally acceptable for service users, especially when they are perceived to be clinically meaningful and helpful in setting and monitoring progress towards goals (Conolly Gibbons et al., 2015). A recent study reported acceptability of ROM in IAPT for children, young people and their parents (Moran, Kelesidi, Guglani, Davidson, & Ford, 2011), but no study to our knowledge has yet investigated the acceptability of ROM in people with psychosis.

As this was a service evaluation project (Twycross & Shorten, 2014), we aimed to assess how well the IAPT-SMI test battery achieved its intended aims of measuring outcome in a manner that was acceptable to service users. Accordingly, we set out to assess service user perceptions of ROM in our IAPT-SMI demonstration site for people with psychosis (Jolley et al., 2015) using quantitative and qualitative methodologies. In particular, we aimed to investigate:

- 1) Satisfaction with the IAPT-SMI assessment battery administered at baseline, mid and end-of-therapy.
- 2) Demographic and clinical characteristics associated with baseline IAPT-SMI assessment battery satisfaction. In particular we wanted to know if clients with greater difficulties or those who did not engage in therapy after completing baseline measures were less satisfied with their completion.
- 3) Satisfaction with sessional ROM used in IAPT-SMI.
- 4) User experiences of ROM (both periodic and sessional) through a thematic analysis of feedback, explicitly focussing on helpful and unhelpful aspects.

## **METHOD**

### **Setting and participants**

The South London and Maudsley (SLaM) NHS Foundation Trust IAPT-SMI psychosis demonstration site offered Cognitive Behaviour Therapy for psychosis (CBTp) and Family Intervention for psychosis (FIp). These therapies were offered in two care pathways: *Early Psychosis*, serving people with a first presentation of

psychotic symptoms, and *Promoting Recovery*, serving people with an established psychosis. Data are reported from 1/11/12 to 1/3/15.

## Measures

### *Clinical outcomes:*

#### *a) Sessional:*

The primary outcome was a session-by-session patient reported measure - the short version of the *Choice of outcome in cognitive therapy for psychoses* (CHOICE, Greenwood et al., 2010). (Table 1). This questionnaire was developed collaboratively with service users with psychosis who had experience of CBT for psychosis. The CHOICE asks participants to rate 11 statements referring to a mixture of potential general recovery (e.g., "ways of dealing with my everyday stresses"; 'positive ways of relating to people') and specific therapy goals (e.g. 'understanding my experiences (e.g. thoughts, voices...); 'the ability to question the way I look at things') in relation to how they felt about it over the last week. Respondents also identify their own personal goal ('a personal goal that you would like to achieve in therapy') and rate their progress towards it. The CHOICE was completed at the start of every session by the service user themselves either in the waiting room, or in the therapy session (depending on their preference). The therapist briefly reviewed the contents of the CHOICE with the client at the beginning of each session, paying particular attention to progress towards the client's goal for therapy.

#### *b) Periodical:*

The remaining IAPT-SMI measures were completed three times, at baseline, mid-therapy (3 months), and end-of-therapy with a graduate psychology assistant independent of therapy delivery. They comprised the Euroqol group's *EQ5D* economic evaluation tool (EuroQoL, 1990); the *Warwick-Edinburgh Mental Wellbeing Scale* (WEMWBS, Tennant et al., 2007); the *Work and Social Adjustment Scale* (WSAS, Mundt, Marks, Shear & Greist, 2002); and the *Psychotic Symptom Rating Scales* (PSYRATS, (Haddock, McCarron, Tarrier, & Faragher, 1999). The *Clinical Outcomes in Routine Evaluation-10* (CORE-10) (Barkham et al., 2012), was added to the

battery as the Trust's ROM for all psychological therapies. The WEMWBS, WSAS and CORE-10 are patient-report scales; the PSYRATS is rated by the assessor based on a structured interview.

- Insert Table 1 about here -

#### *c) Feedback about Measures (F*

luate satisfaction with outcome monitoring (Figure 1a). The FaM comprises a rating on a 10 point Likert Scale from 0 (extremely unhelpful) to 10 (extremely helpful) (Q1), and two open questions about helpful/liked/valued (Q2) and unhelpful/disliked/not valued (Q3) aspects of measures completion. A comparable version (FaM<sub>SESSIONAL</sub>) was used specifically to evaluate satisfaction with session-by-session completion of the primary outcome measure (CHOICE) (Figure 1b).

Please insert Figure 1 about here

#### **Procedure**

All participants gave written consent for all their responses to be used anonymously for service evaluation, including the dissemination of findings outside the Trust. The service evaluation was approved by the Trust's audit and evaluation committee (ref. PSYCHLO-13-18). Participants were invited to give feedback and complete the FaM at baseline, mid and end-of-therapy assessments. The FaM<sub>SESSIONAL</sub> was introduced in September 2013, 9 months after the start of the service (1/11/12), so was not completed by anybody finishing therapy during this time (n=27 mid-therapy and n=34 end-of-therapy). Each assessment took approximately 45 to 90 minutes. All measures were completed on paper.

#### **Analyses**

*Quantitative:* FaM variables were not normally distributed. Overall satisfaction with outcome monitoring (FaM Q1) at each time point, and change in satisfaction ratings over time (x3 time points for FaM; x2 for FaM<sub>SESSIONAL</sub>) were assessed using Wilcoxon and Friedman's tests for repeated samples to investigate if satisfaction with outcome monitoring changed across time. Associations of demographics and clinical characteristics with satisfaction were assessed using non-parametric (Spearman's Rho) correlations, and Mann Whitney U-tests. These tests were conducted to investigate whether particular characteristics were

associated with reduced satisfaction. The relationship between satisfaction and engagement was assessed by comparing the ratings of therapy starters with therapy non-engagers employing a Mann-Whitney U-test. This latter test aimed to ascertain if lower satisfaction with measure completion was associated with a higher likelihood of drop out before the start of therapy.

*Qualitative.* Statements provided in response to questions two and three (Q2, Q3) of both versions of the FaM were written down verbatim at the assessment point. Data were thematically analysed (Braun & Clarke, 2006) by the first author in three stages. Individual statements were initially coded for as many potential themes/ meanings as possible. Themes and subthemes were then identified from initial codes. In the last stage, themes were reviewed and refined in relation to the original data coded responses and the overall dataset. Credibility checks (Barker & Pistrang, 2005) comprised review of super-ordinate and individual themes by a second rater, and a blind analysis for 50 randomly selected statements. Inter-rater reliability was found to be good (Cohen's kappa = 0.8,  $0 < .001$ , 95% CI 0.68 – 0.92). Qualitative comments were triangulated with quantitative ratings (Olsen, 2004).

## RESULTS

### Sample characteristics

Two-hundred and eighty-one service users completed the FaM at baseline (Q1) and were therefore included in the current study. Demographic and clinical information for all participants completing the FaM at baseline (Q1) is presented in Table 2. Sixty-eight percent of the sample had a F20 diagnosis and the remaining 32% had other primary diagnoses (e.g. F30-39, F41-49) but presented with current psychotic symptoms. Scores on the primary sessional (CHOICE) and secondary measures were similar to those reported during the first operational year of IAPT-SMI (Jolley et al., 2015). PSYRATS scores are also equivalent to those reported for a community based sample of service users with psychosis before commencing Cognitive Therapy in Morrison et al., (2004) (PSYRATS-V Mean (SD) = 16.0 (14.1) and PSYRATS-D Mean(SD) = 13.0 (6.9)).



Please insert Table 2 about here

Figure 2 shows a flow diagram of participants completing each assessment stage and each FAM measure, as a proportion of those invited. Two of 291 service users who accepted to receive the IAPT-SMI service refused to complete the IAPT-SMI baseline measures, and of the 289 who completed the IAPT-SMI baseline assessment, 281 (97%) provided feedback about measures. Therefore 281/291 (96.6%) of those who used the service provided feedback about ROM. Participants who did and did not complete feedback about the sessional measure (FaM<sub>SESSIONAL</sub>) did not differ on gender ( $\chi^2(1) = .9, p = .344$ ), age (Mann-Whitney's U, = 801,  $p = .488$ ), ethnicity ( $\chi^2(1) = .01, p = .901$ ) or FaM baseline level of satisfaction (Mann-Whitney's U = 857,  $p = .826$ ).

Please insert Figure 2 about here

### **Aim 1: Satisfaction with IAPT-SMI test battery**

As can be seen in Figure 3, the majority of clients (64%) reported that completing the IAPT-SMI baseline battery was actively helpful (FaM score range 6-10), with a further 29% reporting it as neutral and a remaining 7% as unhelpful (FaM score range 0-4). The mean baseline satisfaction of 6.6 (SD = 2.1) reported in relation to the IAPT-SMI battery was similar at subsequent assessment points (FaM for baseline, mid-therapy, end-of-therapy IAPT-SMI measures: Friedman's test  $\chi^2(1) = .3, p = .873, n = 72$ ).

Please insert Figure 3 about here

### **Aim 2: Baseline IAPT-SMI satisfaction and client characteristics:**

#### *2.1 Associations with demographic and clinical variables*

Of the demographic variables considered (Table 3), only age was associated with satisfaction about the measures (younger age with lower satisfaction). All patient rated baseline clinical assessment measure scores were significantly associated with satisfaction, suggesting that participants were less satisfied with

completing measures when they had poorer levels of recovery, general mental health or functioning. There was however no significant association between satisfaction with measure completion and severity of psychotic symptoms, assessed by the clinician-rated measures (PSYRATS for hallucinations and delusions).

Please insert Table 3 about here

## *2.2 Engagement in therapy*

Thirteen service users (5%) did not attend any therapy sessions after the assessment. Reported satisfaction with baseline assessment did not significantly predict non-engagement with therapy (Table 3). Of the 281 clients, 257 were offered CBTp and the remaining 24 Flp. The likelihood of not engaging with therapy after the baseline assessment was significantly higher for those who had been due to commence Flp ( $n = 4$  (17%)) than for those who were due to start CBTp ( $n = 9$  (4%),  $\chi^2(1) = 8.6$ ,  $p = .017$ ). Clients from the Early Intervention Pathway were also marginally less likely to engage in therapy than individuals in the Promoting Recovery services (EI  $n = 7$  (9%); PR  $n = 6$  (3%),  $\chi^2(1) = 4.2$ ,  $p = .047$ ). However, as can be seen in Table 3, satisfaction ratings with outcome monitoring (FaM) at baseline did not differ according to the pathway where the therapy was offered (Early Intervention/ Promoting Recovery), the type of therapy offered (CBTp/Flp), or engagement with the intervention.

## **Aim 3: Satisfaction with sessional outcome measure**

As shown in Figure 3, the session-by-session measure (CHOICE) was well received, with about 70% of clients reporting it to be helpful (FaM<sub>SESSIONAL</sub> score range 6-10), 22% neutral and 6% unhelpful at the mid assessment point (Mean = 6.6 (SD =2.0)) and this remained unchanged by the end of therapy (FaM<sub>SESSIONAL</sub> assessed at mid-therapy and end-of-therapy: Wilcoxon  $Z = -.1$ ,  $p = .942$ ,  $n = 33$ ).

## *3.1 Associations with sessional primary outcome progress (CHOICE)*

There was some evidence that having a lower final score on the session-by-session measure was associated with reduced satisfaction with its completion. Satisfaction with sessional outcome monitoring at end-of-therapy was significantly associated with end-of-therapy CHOICE scores ( $\rho = .37$ ,  $p < .001$ ) but not with

CHOICE change scores (pre-post) ( $\rho = .18$ ,  $p = .106$ ). Satisfaction mid-therapy was not significantly associated with mid-therapy CHOICE scores ( $\rho = -.04$ ,  $p = .742$ ) or CHOICE change scores from baseline to mid-therapy ( $\rho = .02$ ,  $p = .277$ ).

#### **Aim 4: Qualitative analysis of service users' experience of ROM**

##### *4.1 IAPT-SMI baseline assessment themes*

4.1.1 Helpful aspects of ROM: Of 281 clients, 257 provided responses to the qualitative questions of the FaM questionnaire, 24 left these blank. The four overarching themes for helpful aspects (interpersonal encounter, opportunity to reflect, acceptability of the measures and potential use for therapy), sub-themes, theme frequency, and verbatim examples regarding helpfulness (FaM Q2) are given in Table 4. Diagnosis (F20 vs. Other) was not associated with identifying a particular type of overarching theme ( $\chi^2 = 2.8$ ,  $df = 3$ ,  $p = .319$ ).

–Please insert Table 4 about here –

4.1.2 Unhelpful aspects of ROM: As shown in Table 4, three main super-ordinate themes were identified, relating to the format of measures, measures eliciting distress or simply not liking them. Service users with a F20 diagnosis were more likely to report that the measures' *format* was unhelpful ( $n = 64/100$ , 64%) than those with other diagnoses ( $n = 20/47$ , 42.6%), whereas the latter group were more likely to mention that the measures elicited distress ( $n = 20/47$ , 42.6%), than the F20 group ( $n = 26/100$ , 26%) (Diagnosis group x super-ordinate unhelpful theme Pearson's chi-square:  $\chi^2 = 6.0$ ,  $df = 2$ ,  $p = .049^*$ ).

##### *4.2 Session-by-session assessment: themes*

All participants completing Q1 of the FaM<sub>SESSIONAL</sub> also provided qualitative responses. Themes elicited were similar to those regarding the baseline assessment (see Table 5). New specific themes emerging were related to finding the CHOICE helpful as a way of monitoring improvements (theme 1), but unhelpful when

progress was not being made (theme 11). The goal setting item in the CHOICE was particularly valued (theme 2). Completion of the CHOICE on a weekly basis was reported to be 'boring' and 'repetitive' by around 15% of the sample at one of more time points, with about 5% at the end of therapy expressing concerns about therapy time being taken up by ROM.

Please insert Table 5 about here

#### *4.3 Disentangling feedback about distress*

Of the 48 participants who reported distress in relation to measure completion at baseline in the qualitative question (FaM Q3), n= 5 (10%) rated the assessment as unhelpful in the quantitative FaM question (Q1), n=9 (19%) felt indifferent, and the remaining n= 34 (71%) reported measure completion to be helpful at baseline. For example, one participant reported that the measures were '*a bit personal*' (Theme 15, Table 5), but rated overall satisfaction (FaM Q1) as 10 (extremely helpful) and made a comment about the measures helping her to '*realise how I have improved*' (Theme 4, Table 5).

#### **Triangulation of quantitative and qualitative data**

Of the 178 participants who found the IAPT-SMI baseline measures helpful (FaM score 6-10), qualitative data were available for 165 (93%). Of these, 152 (92%) reported a qualitative statement about the helpfulness of measures (Q2) whereas 86 (48%) made a qualitative comment about unhelpfulness (Q3). Of the 20 clients rating the measures as unhelpful (FaM score 0-4), 9 (45%) reported a helpful aspect of the measures; (Q2) and 17 (85%) an unhelpful aspect (Q3). Similarly, of the 20 participants who had reported the IAPT-SMI baseline measures to be unhelpful in the 10-point Likert scale in the FaM, 17 (85%) reported a qualitative statement about unhelpfulness whereas 86 out of the 178 (48%) made a negative qualitative statement in Q3 of the FaM.

#### **DISCUSSION**

We set out to evaluate service user perceptions of routine outcome monitoring in our IAPT-SMI demonstration site for people with psychosis (Jolley et al., 2015). Overall, the IAPT-SMI battery (administered

at baseline, mid-therapy and end-of-therapy) and the sessional outcome measure (CHOICE) were found to be acceptable to service users with psychosis accessing psychological therapies across early intervention and support and recovery services. Initial levels of satisfaction were maintained across time.

Given that service user experiences of CBTp have only recently started to be evaluated and reviewed (Holding, Gregg, & Haddock, 2016), the current study, as the first to our knowledge seeking feedback on ROM in the context of CBTp, is a significant step forward.

### **Engagement with therapy in IAPT-SMI**

We found no evidence that satisfaction levels with IAPT-SMI outcome monitoring affected engagement with therapy, although engagement patterns reflected the known engagement difficulties at first episode of psychosis (Garety & Rigg, 2001) and implementation challenges in Flp (Onwumere, Grice, & Kuipers, 2016).

### **Outcome monitoring in IAPT-SMI: a valued opportunity for service users**

One of our key findings was that the majority of service users (189, 74%) found the measures not only acceptable, but volunteered positive qualitative feedback. Service users felt understood by the assessor, valued the opportunity to express their feelings, reflected and re-appraised current difficulties and, in some cases, decided they were coping better than they thought. Measures were reported to be appropriate and relevant, and our sessional measure, the CHOICE (Greenwood et al., 2010) helped service users to notice improvements and to keep the therapy focussed on their goal.

### **Lessons from negative feedback**

The most common complaints were about the length of baseline assessments (24%) and the frequency of sessional monitoring (19%). Ethnicity and gender were not associated with overall measure satisfaction, but younger service users were less satisfied. Further research could investigate measure adaptations for the

younger service users, perhaps learning from the success reported in IAPT for children, young people and their parents (Moran, Kelesidi, Guglani, Davidson, & Ford, 2011).

Lower satisfaction with measure completion was also reported by those with higher general symptom severity. Qualitative comments indicated that completing the CHOICE sessionally could be discouraging when progress was not being made. This echoes reports of the detrimental impact on self-esteem of repeated feedback of limited progress during Cognitive Remediation Therapy (Rose et al., 2008). Therefore, we recommend that feedback about the sessional outcome measure (FaM<sub>SESSIONAL</sub>) is assessed when the measure is completed (i.e. every session) providing opportunities within the session to address issues that may arise following completion. This is particularly important given that since its introduction in our implementation site, only 72% and 73% of participants completed the FaM<sub>SESSIONAL</sub> at mid-therapy and end-of-therapy assessments respectively.<sup>1</sup> Reasons for missing data were not specified by assessors, but might relate to the FaM<sub>SESSIONAL</sub> being the last measure in the assessment pack. However, it is also possible that completion was less likely amongst those who were dissatisfied, limiting the accuracy of our findings. Requesting feedback immediately after sessional completion might increase response rates further.

An important minority (n=20, 7%) reported that the baseline assessment was unhelpful and a total of 48 service users (20%) experienced assessments as intrusive or upsetting. This is not surprising given the known emotional reactivity to stressful events in people with psychosis (Myin-Germeys et al., 2001) and evidence that exposure to negative information about the self can trigger and exacerbate negative mood (Brewin, 2006). Although our demographic and clinical indicators served to identify who was more likely to find assessments unhelpful, future research should also consider attitudinal measures of beliefs about problems. However, it is of note that service users with a F20 diagnosis (Schizophrenia, schizotypal and delusional disorders) were more likely to struggle with the length assessments. Moreover, we need to understand the reasons why approximately 16% of service users (see Figure 2) declined to complete the IAPT-SMI outcome monitoring measures at mid and follow up as this could be an indirect measure of unacceptability.

## Clinical and research implications

Future monitoring of the impact of routine outcome monitoring upon engagement should assess the effects of service configuration (e.g. independent assessors administering ROM to use scarce therapist resources efficiently), and of perceived pressure to give positive ratings given the prevalence of social rank concerns and submissiveness in people with psychosis (Allison, Harrop, & Ellett, 2013; Birchwood et al., 2007). Future modifications may include reducing the length of the test battery and reducing the frequency of assessment when completion is perceived as unhelpful. Ease of completion should also be monitored, especially in relation to cognitive difficulties and language barriers. Further research should also investigate how particular characteristics of the assessment battery influence satisfaction. For example, the IAPT-SMI battery deliberately included recovery-focussed measures, with an emphasis on wellbeing (e.g. 'Items include: *I've been feeling interested in new things*' WEMWBS; '*Positive ways of thinking*', CHOICE). Alternatively, given the high level of social isolation in people with psychosis, even at the early stage of illness (Gayer-Anderson & Morgan, 2013), interpersonal aspects of the assessment may be associated with satisfaction. The general acceptability of ROM to service users with psychosis needs further research, particular amongst those individuals who were refused the IAPT-SMI service in spite of our flexible and assertive approach to offering psychological therapy.

Predictors and moderators of successful completion could be understood further. For instance, use of online tools and training enhances ROM implementation (Persons, Koerner, Eidelman, Thomas, & Liu, 2016) and the potential impact of outcome monitoring in reducing instances of poor treatment outcome in CBT for psychosis could be investigated, given existing evidence on the benefits of alerting clinicians about early lack of progress using ROM (Connolly Gibbons et al., 2015; Priebe et al., 2007; Shimokawa, Lambert, & Smart, 2010). Additionally, the impact of completing the sessional measure (CHOICE) at the start of the session requires further research, as this could have potentially resulted in capturing the worst the client feels.

The immediate impact of assessment on mood could also be better understood by using a visual analogue scale before and after assessment, as in mood induction procedures (Scherrer, Dobson, & Quigley, 2014). For those experiencing adverse reactions, assessments could then be modified, or omitted. A short post-assessment debrief procedure may also be useful. For example, mindful breathing could help to minimise reactions to negative thoughts (Feldman, Greeson, & Serville, 2010) or compassionate imagery exercises (Diedrich, Grant, Hofmann, Hiller, & Berking, 2014), could be included to target retrieval competition of negative aspect of the self (Brewin, 2006).

## **Conclusions**

Routine outcome monitoring as part of an IAPT-SMI psychosis demonstration site was acceptable and largely valued by service users, although a preference for a shorter assessment battery was expressed by some. Further research should monitor stress reactions particularly in those who are younger, report higher severity of general symptoms and/or lower functioning. The movement towards ROM in the provision of evidence-based interventions to monitor performance and inform service commissioning in publicly funded services is well underway (Boswell et al., 2015). Our findings suggest that the benefits of ROM can readily be extended to people with psychosis, provided assessments are chosen and administered with sensitivity.



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FIGURE 1 Feedback about Measures (FaM) forms

1a Feedback about Measures form (FaM) for IAPT-SMI periodic outcome assessment pack

Feedback about Measures

FaM

Fornells-Ambrojo et al (in preparation)

We value your feedback about the completion of measures.  
Please answer the following questions.

1. How did you find the completion of measures/ questionnaires TODAY?  
Please circle the number below the number that best describes your experience

Extremely  
unhelpful

Neither helpful  
or  
unhelpful

Extremely  
Helpful

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

2. One thing that I found helpful/ I liked/ I valued about the completion of measures today was...  
Please write down statement below:

3. One thing that I found unhelpful/ I disliked/ I did not value about the completion of measures today was...  
Please write down statement below:

Thank you!

1b Feedback about Measures form for sessional measure (FaM<sub>SESSIONAL</sub>)

Feedback about Measures

FaM<sub>SESSIONAL</sub>

Fornells-Ambrojo et al (in preparation)

4. Now I want to ask you feedback about the questionnaire you completed EVERY SESSION with the therapist/at reception (if you would like, we can show you a copy of the questionnaire)  
  
How did you find the completion of the session-by-session questionnaire?  
Please circle the number below the number that best describes your experience:

Extremely  
unhelpful

Neither helpful  
or  
unhelpful

Extremely  
Helpful

0	1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	---	----

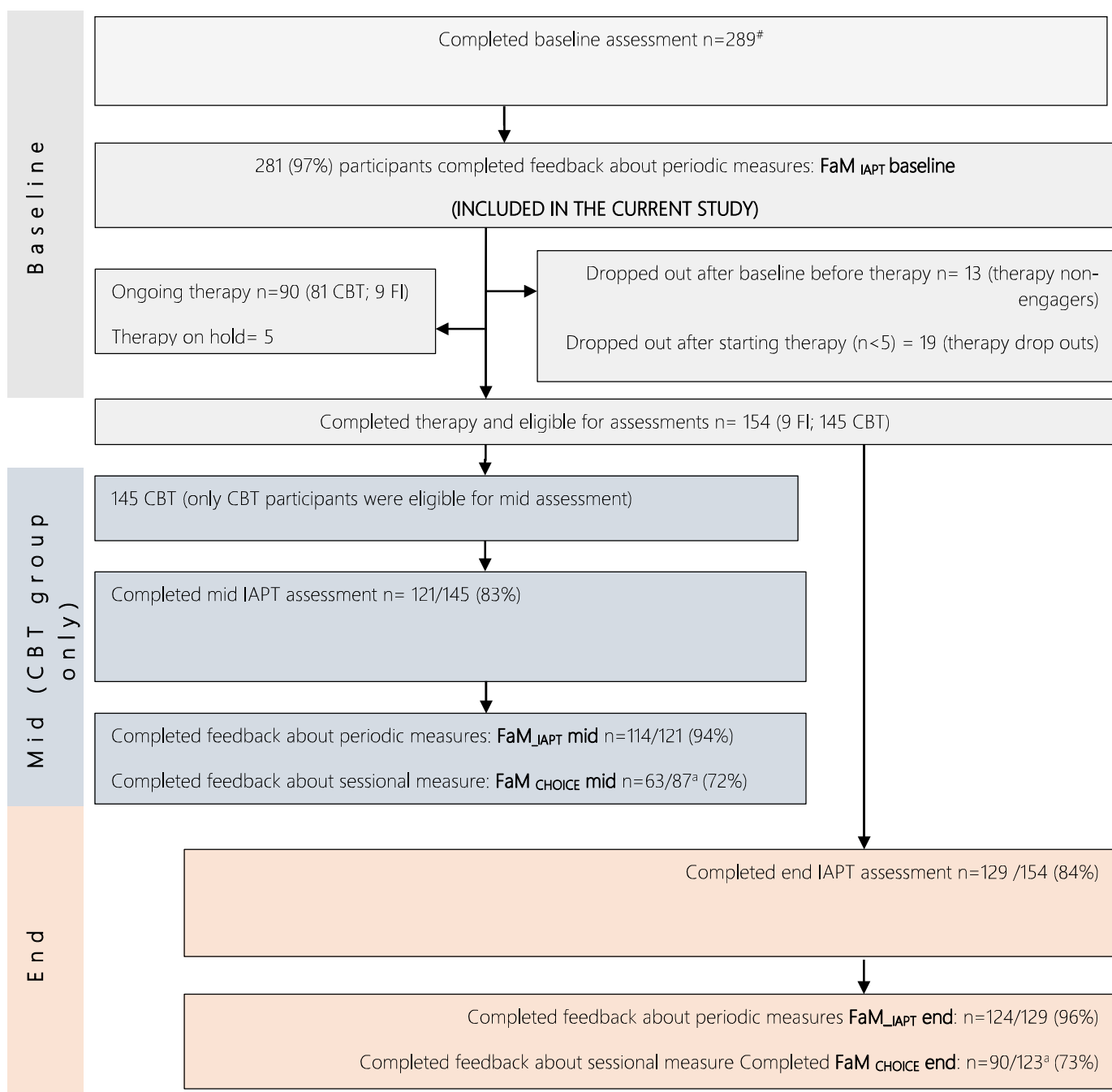
5. One thing that I found helpful/ I liked/ I valued about completing the session-by-session questionnaire was...  
Please write down statement below:

6. One thing that I found unhelpful/ I disliked/ I did not value about completing the session-by-session questionnaire was...  
Please write down statement below:

Thank you!



Figure 2 Participant flow diagram and completion rates of assessment and feedback about measures

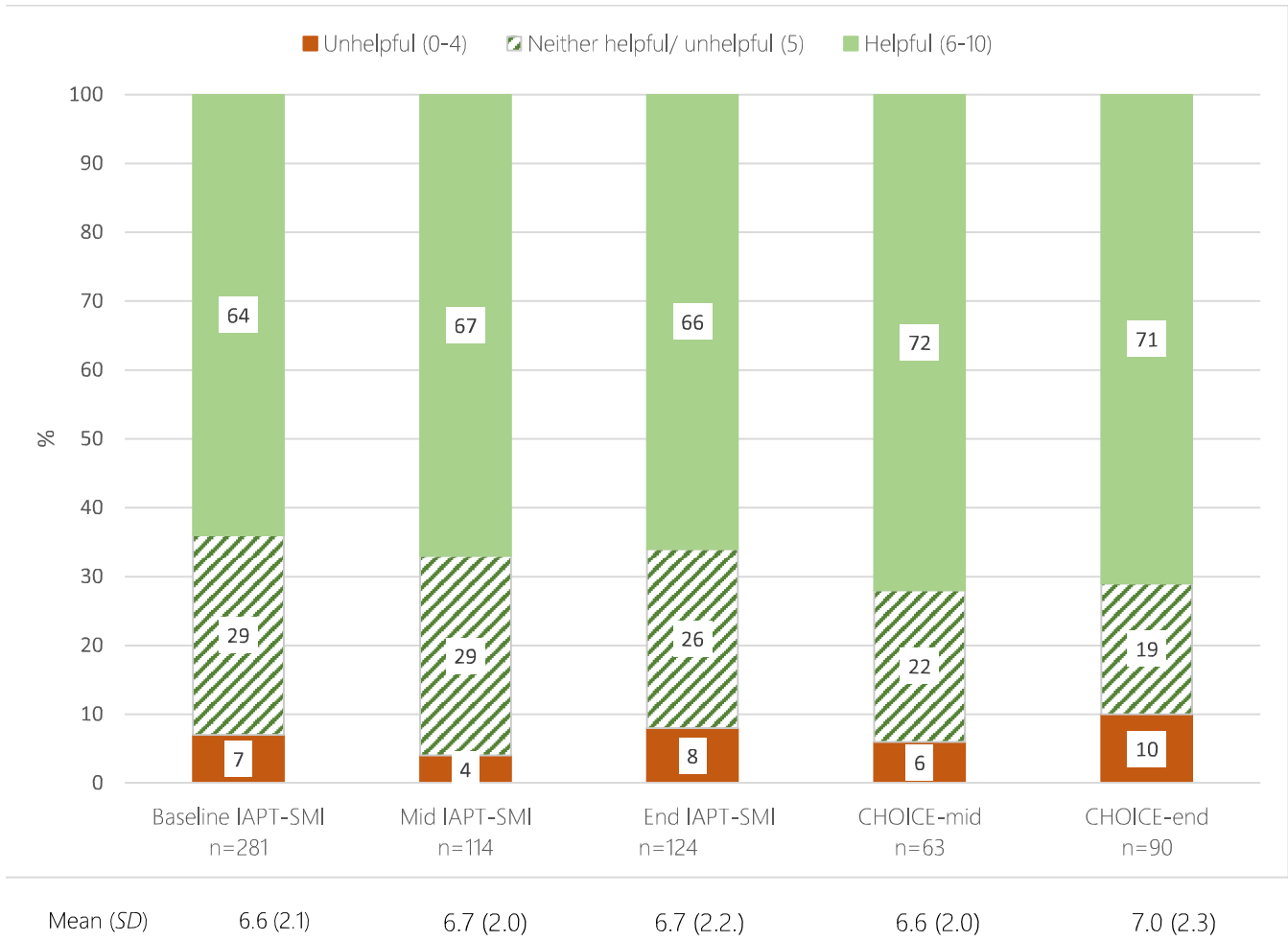


<sup>#</sup> 291 service users accepted to receive the IAPT-SMI service (i.e. psychological therapy), but n=2 of them refused to complete the IAPT-SMI baseline assessment; CHOICE: *Choice of outcome in cognitive therapy for psychoses* (Greenwood et al., 2010); CORE-10: Clinical Outcomes in Routine Evaluation (10 item) Barkham et al., 2013; WEMWBS: Warwick Edinburgh Mental Wellbeing Scale (Tennant et al., 2007); WSAS: Work and Social Adjustment Scale (Mundt et al., 2002); PSYRATS: Psychotic Symptoms Rating Scale (Haddock et al., 1999); V: Voices; D: Delusions; FaM: *Feedback about Measures (FaM) assessment for the IAPT-SMI test battery*; FaM<sub>SESSIONAL</sub>: *Feedback about Measures (FaM) assessment for the CHOICE (sessional measure)*; <sup>a</sup> Please note the FaM<sub>SESSIONAL</sub> was added in September 2013, 9 months after the start of the service (1/11/12) therefore 27 and 34 people were not invited to complete it at the mid and end points respectively. The denominator reflects the number of participants who were invited to complete the FaM<sub>SESSIONAL</sub>; CBTp: Cognitive Behaviour therapy for psychosis; FIp: Family Intervention for psychosis



Figure 3

**FIGURE 3** Satisfaction with measure completion as assessed by the Feedback about Measures for periodic (baseline/mid/end) (FaM<sub>IAPTSMI</sub>) and the sessional measure (FaM<sub>CHOICE</sub>)



IAPT SMI: Improving Access to Psychological Therapies – Severe Mental Illness; CHOICE: *Choice of outcome in cognitive therapy for psychoses* (Greenwood et al., 2010)

TABLE 1 Clinical outcome measures

Frequency	Name of measure	Construct	Characteristics and item example
IAPT-SMI battery	Every session	Choice of outcome in cognitive therapy for psychoses (CHOICE, Greenwood et al., 2010)	Psychological recovery and personalised therapy goal
			<ul style="list-style-type: none"><li>▪ Service- user designed measure to evaluate change in Cognitive Behaviour Therapy for psychosis in relation to recovery values</li><li>▪ Areas covered include: confidence, positive ways of relating to people, a sense of being in control of life, hope, being able to cope and the ability to question the way one looks at things</li><li>▪ Self-report</li><li>▪ 11 items and one personal goal, Likert scale: 0 (worst) – 10 (best). Item content:<ul style="list-style-type: none"><li>→ 9 items assess generic recovery-related content (e.g. 3. <i>Positive ways of relating to people</i>, 5. <i>Ways of dealing with everyday life stresses</i>)</li><li>→ 2 items assess CBTp specific outcomes (e.g. 4. <i>The ability to question the way I look at things</i>).</li></ul></li></ul>
Baseline, mid therapy		Warwick-Edinburgh	Positive
		Mental Wellbeing	mental health
		Scale (WEMWBS, Tennant et al., 2007)	
			<ul style="list-style-type: none"><li>▪ Self-report</li><li>▪ 14 items; Likert scale 1: (none of the time)- 5 (All the time)</li><li>▪ Item example: <i>'I've been feeling optimistic about the future'</i></li></ul>

<i>Work and Social Adjustment Scale</i> (WSAS, Mundt, Marks, Shear & Greist, 2002)	Impairment in functioning	<ul style="list-style-type: none"> <li>▪ Self-report</li> <li>▪ 14 items, Likert scale 0 (Not at all) – 10 (Very severely)</li> <li>▪ Item example: <i>'Because of my [problem] my ability to work is impaired'</i></li> </ul>
<i>Psychotic Symptom Rating Scales</i> (PSYRATS, (Haddock et al., 1999))	Auditory hallucinations and delusional beliefs	<ul style="list-style-type: none"> <li>▪ Multi-dimensional assessment, including distress and impact</li> <li>▪ Observer rated from structured interview*</li> <li>▪ 17 items (11 for auditory hallucinations, 6 for delusions)</li> <li>▪ Item example: <i>How often do you hear the voices?</i></li> </ul>
<i>EQ5D economic evaluation tool</i> (EuroQoL, 1990),	Health status	<ul style="list-style-type: none"> <li>• Generic measure of health for clinical and economic appraisal, areas include: mobility, self-care, usual activities, pain, and anxiety.</li> <li>▪ Self-completion</li> <li>▪ 5 items multiple choice</li> <li>▪ Item example: Mobility: <i>I have no problems in waking about/ I have some problems in walking about/ I am confined to bed</i></li> </ul>

SLaM outcome measure <i>Baseline, mid and end of therapy</i>	<i>Clinical Outcomes in</i>	Psychological	<ul style="list-style-type: none"> <li>■ Generic measure of psychological distress covering well-being, symptoms, functioning and risk</li> </ul>
	<i>Routine Ev</i>	- distress	
	10 (CORE-10)		<ul style="list-style-type: none"> <li>■ Self-report</li> </ul>
	(Barkham et al., 2012)		<ul style="list-style-type: none"> <li>■ 10 items, Likert scale 0 (Not at all)- 10 (Most of the time)</li> <li>■ Item example: ' <i>I have felt despairing or hopeless</i>'</li> </ul>

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\*All measures were patient-rated (PROM) apart from the PSYRATS that was clinician rated; SLaM: South

London and Maudsley NHS foundation trust

**TABLE 2** Demographic and clinical data characteristics

Variable		All
		n=281
Demographic	Age (years): Mean (SD); [Range]	37.0 (11.9) [17-68]
	Male gender	138 (49%)
	Unemployed	147 (53%) <sup>a</sup>
	Black/Minority Ethnic group	158 (56%)
	Diagnosis	
	Schizophrenia spectrum ICD (F20-29)	185 (68%)
	Affective disorder ICD (F30-39)	51 (19%)
	Anxiety, dissociative, stress related (F41-F49)	27 (10%)
	Other	8 (3%)
	Early intervention	81 (29%)
Pathway	Promoting Recovery	200 (71%)
IAPT-SMI baseline:	Outcome of cognitive therapy for psychosis (CHOICE)	4.7 (2.2)
	General psychological distress (CORE-10)	17.0 (8.3)
	Presence of auditory hallucinations n (%)	95 (34%)
	PSYRATS- V	22.3 (9.6)
	Presence of delusions (PSYRATS-D) n (%)	122 (43%)
	PSYRATS-D	13.2 (5.3)
	Wellbeing (WEMWBS)	39.3 (11.1)
	Work and social functioning (WSAS)	19.9 (9.4)

Key: ICD: International Classification of Disease (World Health Organisation, 1992); CHOICE: *Choice of outcome in cognitive therapy for psychoses* (Greenwood et al., 2010); CORE-10: Clinical Outcomes in Routine Evaluation (10 item) Barkham et al., 2013; WEMWBS: Warwick Edinburgh Mental Wellbeing Scale (Tennant et

al., 2007); WSAS: Work and Social Adjustment Scale (Mundt et al., 2002); PSYRATS: Psychotic Symptoms Rating Scale (Haddock et al., 1999); V: Voices; D: Delusions; SD=Standard deviation; )<sup>a</sup> Data on employment status available for n=222

Table 3

TABLE 3 Relationship between overall satisfaction with measure completion at baseline (FaM) and key variables (n=281)

Type	Variable	Groups	FaM Mean (SD)	Test <sup>a,b</sup>	p
Demographics and diagnosis	Age	-		.12 <sup>a</sup>	.044*
	Gender	Female	7.0 (2.0)		
		Male	6.8 (2.1)	9857 <sup>b</sup>	.988
	Employment status	Unemployed	6.9 (2.1)		
		Employed	6.9 (1.8)		
				5475 <sup>b</sup>	.933
	Ethnicity	BME	7.0 (1.9)	9361 <sup>b</sup>	.856
		White British	6.7 (2.2)		
	Diagnosis	F20	6.8 (2.0)	7917 <sup>b</sup>	.949
		Other	7.0 (2.2)		
Service and intervention	Pathway	Early Intervention	6.5 (2.1)		
		Promoting Recovery	6.7 (2.1)	7587 <sup>b</sup>	.397
	Intervention offered	CBTp	6.6 (2.1)		
		Flp	6.9 (2.2)	2892 <sup>b</sup>	.608
	Started therapy	Started therapy	6.9 (2.0)		
	post baseline assessment	Did not start therapy <sup>c</sup>	7.0 (2.1)	1583 <sup>b</sup>	.571
IAPT-SMI baseline symptom	Patient-rated	Outcome of cognitive therapy for psychosis (CHOICE)		.15 <sup>a</sup>	.011*
		General psychological distress (CORE-10)		-.14 <sup>a</sup>	.018*
		Wellbeing (WEMWBS)		.12 <sup>a</sup>	.039*
		Work and social functioning (WSAS)		-.12 <sup>a</sup>	.048*
	Clinician-rated	Auditory hallucinations (PSYRATS- V) (n = 95)		.13	.196
		Delusional beliefs (PSYRATS- D) (n=122)		-.07	.437

<sup>a</sup> Spearman's rho ; <sup>b</sup> Mann-Whitney U; <sup>c</sup> Therapy non-engagers: dropped out post baseline assessment and before first therapy session; BME: black and other ethnic minority status; CHOICE: *Choice of outcome in cognitive therapy for psychoses* (Greenwood et al., 2010); CORE-10: Clinical Outcomes in Routine Evaluation (10 item) Barkham et al., 2013; WEMWBS: Warwick Edinburgh Mental Wellbeing Scale (Tennant et al., 2007); WSAS: Work and Social Adjustment Scale (Mundt et al., 2002); PSYRATS: Psychotic Symptoms Rating Scale (Haddock et al., 1999); FaM: Feedback about measures; CBTp: Cognitive Behaviour therapy for psychosis; Flp: Family Intervention for psychosis



**TABLE 4** Themes from the thematic analysis on helpful and unhelpful aspects of the baseline assessment

Super-ordinate theme	Theme	Verbatim examples	Statement n (%)
One thing I found <b>helpful/ liked/valued</b> about the completion of measures today...( n=257) <sup>a</sup>			
Interpersonal	Theme 1 Expressing my feelings	't I am feeling' 19 year old male, BME, EI	26 (10%)
	Theme 2 Being understood	'I felt that someone understood and cared' 65 year old male, non-BME, PR	24 (9%)
Reflect and appraise	Theme 3 Awareness of feelings	"Clarify what I've been feeling' 39-y -old male, non-BME, PR	12 (5%)
	Theme 4 Positive reframe	'Shows that I am coping, not as bad as I thought' 2 -y -old female, BME, EI	17 (7%)
	Theme 5 Ev I'm at	'Helped me to think where I am at in my life' 37-y -old female, BME, PR	15 (6%)
	Theme 6 Focus on problems	'Shows how difficult life is for me' 59 year-old female, PR	25 (10%)
	Theme 7 Generally made me think	'Really makes me think about myself' 22-y -old male BME, EI	19 (7%)
Appropriate	Theme 8 Comprehensive, relevant	'Plenty of depth and scope. Covers most things' 51-y -old female, BMW, PR	17 (7%)
	Theme 9 Format made it easy	'I liked the questionnaires, how straightforward they are' 20-y -old male, non-BME, EI	11 (4%)
	Theme 10 They were ok, helpful	'Everything was helpful, especially about hearing voices' 2 -y female, non-BME, EI	15 (6%)
For therapy	Theme 11 Focus therapy	"That the therapy will be tailored to my personal needs' 47-y -old male, BME, PR	8 (3%)
One thing I found <b>unhelpful/ disliked/did not value</b> about the completion of measures today ... (n=246) <sup>c</sup>			
Format	Theme 12 Too lengthy	'a bit long' 22-y -old, male, BME, EI	60 (24%)
	Theme 13 Difficult to answer	'It i I am feeling' 46-y -old, female, non-BME, PR	15(6%)
	Theme 14 Other challenges	'Difficult for me as find literacy hard' 46-y -old female, BME, PR	
	in answering	' Hard to concentrate and read questionnaires' 29-y female, non-BME, PR	13 (5%)
Distressing	Theme 15 Intrusive	"Too personal at times' 4 -y -old female, BME, PR	13 (5%)
	Theme 16 Upsetting	"Didn't like questions about family as don't talk to them, upsets me' 23-y -old female, BME, EI	35 (14%)
Disliked	Theme 17 Just disliked,	'Prefer talking therapy to questionnaires' 27-y -old male, non-BME, EI	8 (3%)
	Theme 18 Dubious utility	'I'm not sure how a professional would have a clear overview' 43-y -old female, non-BME, PR	11 (5%)

Note: EI: Early intervention PR: Promoting Recovery; <sup>a</sup>Data available for n= 257 participants for helpful aspects, but 12 participants reported two themes, total 269 statements; <sup>b</sup>Each percentage rounded up; helpful; <sup>c</sup> Data available for n= 246 participants for unhelpful aspects, but 15 participants reported two themes total 261 statements Sixty-eight (26%) could not think of anything specifically helpful and 106 (43%) nothing particularly unhelpful about measure completion.

TABLE 5 Themes from the thematic analysis on helpful and unhelpful aspects of weekly CHOICE assessment at mid and end points

Theme		Verbatim examples		Mid	End
Helpful aspects	Theme 1 Notice improvements	'Monitoring progress, gives confidence' <sup>21-year-old male, BME, EI</sup>		21 (33%)	35 (39%)
	Theme 2 Having a goal/ focus for therapy	'I like the goal question, it gives a direction for working on...' <sup>26-year-old male, non-BME, EI</sup>		13 (20%)	13 (14%)
	Theme 3 Improves understanding	'Helped me to think more rationally about my problems' <sup>54-year-old male, non-BME, PR</sup>		6 (9%)	12 (13%)
	Theme 4 Relevant and ease of use	'That something objective was measured' <sup>37-year-old male, non-BME, PR</sup>		9 (14%)	12 (13%)
Unhelpful aspects	Theme 6 Boring, repetitive, too frequent	'Irritating, repetitive' <sup>52-year-old, female, non-BME, PR</sup>		6 (12%)	13 (19%)
	Theme 7 Took time away from therapy	'Felt it disrupted the session, takes up valuable session time' <sup>36-year-old male, non-BME, PR</sup>		-	5 (7%)
	Theme 8 Difficult to answer, not tailored	'A bit black and white- doesn't reflect how I feel always' <sup>49-year-old male, non-BME, PR</sup>		9 (18%)	10 (15%)
	Theme 9 Don't see the point	'Doesn't mean anything to me' <sup>19-year-old male, BME, EI</sup>		6 (12%)	7 (10%)
	Theme 10 When there is no progress	'If I wasn't doing well, then it made me feel anxious' <sup>39-year-old female, non-BME, PR</sup>		3 (6%)	3 (4%)

EI: Early intervention pathway' PR: Promoting Recovery Pathway; BME: black and ethnic minority; H: Helpful aspects; UN: Unhelpful aspects