

ORIGINAL ARTICLE

A core approach to practice-based evidence: A brief history of the origins and applications of the CORE-OM and CORE System

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Abstract

This article reviews the development of the CORE-OM and CORE System from 1995 to 2005 in the context of the need to measure, monitor, and manage the delivery of counselling and the psychological therapies in service of providing best quality care for clients. The origins and philosophy of these tools are summarised and practical aspects of how to use them in routine service settings are set out, including an easy to use look-up table of differing ways of presenting CORE-OM scores and their associated meaning. The wider family of CORE outcome measures is briefly outlined to show the relationship between the various versions and how each is designed for a specific purpose. These outcome tools are set within the broader context of the CORE System. In turn, the CORE-OM and CORE System are placed within the paradigm of practice-based evidence and examples are provided of how these tools have been applied in routine as well as more traditional evaluative settings.

The aim of the present article is two-fold. The first aim is to provide a background to the origins and development of the CORE-OM and its role as part of the broader-based CORE System during the period 1995 to 2005. The second aim is to consider the applications of both the CORE-OM and CORE System within the context of the developing paradigm of practice-based evidence up to 2005.

Keywords: CORE-OM, CORE System, outcomes, practice-based evidence

Origins of CORE and practice-based evidence

The origins of CORE lie in a slightly obscure but seminal chapter by Irene Waskow (1975) entitled *Selection of a core battery*, which arose out a 1970 American Psychological Association scientific conference on psychotherapy change measures (Waskow & Parloff, 1975). Waskow proposed the idea that there was merit in devising a core outcome battery that could be adopted by most researchers and yet at the same time recognising that they could also supplement this 'core' component with additional measures which were of special interest to particular groups of researchers. Although this proposal attempted to balance practitioner-driven selection of measures with some commonality of measurement across studies, the idea was not taken on board for a variety of reasons (for details, see Barkham et al., 1998). However, by the mid-1990s, the issue of outcomes was increasingly coming to the fore and a further conference on selecting a core outcome battery was held in the US which resulted in a substantial text (see Strupp, Horowitz & Lambert, 1997). These initiatives provided the momentum in the UK for devising a core outcome measure that could

be adopted widely by both practitioners and researchers (Barkham et al., 1998).

While a vision of a core outcome struck a chord with many people, it also invoked considerable hostility, much of it quite understandable, as some sensed the potential for restricting choice and standardising procedures. Two particular strands of thought related to (a) people wanting to use their own measure, and (b) a degree of ambivalence towards the existing outcome measures that were available. Practitioners tended to use either 'home grown' instruments or rely on measures imported from the US which tended to focus predominantly on symptoms. In addition, such measures were proprietary instruments which carried purchase costs and a bar on adapting them for specific needs in the UK. Hence, there was a need for a short and 'free' outcome measure that could be used widely in the UK. In 1994, the Mental Health Foundation (MHF) funded a conference on Psychotherapy Research at Balliol College Oxford (see Aveline & Shapiro, 1995). One specific outcome of this event was a Psychotherapy Research Initiative funded by the MHF which set out to support research in three areas, one of which was the development of a core outcome battery. This

programme of research ultimately yielded a client-completed measure, namely the Clinical Outcomes in Routine Evaluation-Outcome Measure (CORE-OM).

With the development of the CORE-OM in place, it became apparent that such an outcome measure needed to be complemented by additional contextual information about the presentation of the client from the perspective of the practitioner. There had been a strong interest in service evaluation within the UK chapter of the Society for Psychotherapy Research (SPR). Mindful of this, a group of SPR(UK) members based in Northern England met on a regular basis and developed, over a period of some time, practitioner-completed forms which captured the context within which counselling and the psychological therapies occurred. This work was funded by the Counselling in Primary Care Trust and Leeds Mental Health Teaching NHS Trust. The complementarity of the client- and practitioner-completed forms, completed at pre- and post-therapy, progressed what might otherwise have been just a series of forms into a coherent system, termed the CORE System, for profiling the delivery of counselling and the psychological therapies. This 'system' then increasingly became a plausible means for capturing common service data that could be combined across services to yield a level of evidence that would have relevance to practitioners and researchers nationally.

Development and philosophy of CORE

The CORE-OM was designed as a non-proprietary measure of psychological distress. Crucially, it was informed by feedback from practitioners as to what they saw as being important to include in a core outcome measure (for details of this procedure, see Mellor-Clark, Barkham, Connell & Evans, 1999). The resulting domains which were adopted were: subjective well-being, problems/symptoms, functioning, and risk to self or others (Figure 1). The purpose was to provide a free, user friendly, and pantheoretical outcome measure which was sensitive to both low intensity and high intensity ranges of distress, which tapped positive attributes as well as pathological symptoms, and could be used in both research and practice settings (Barkham et al., 1998).

Since its development, the CORE-OM has been verified in a general population sample (Connell et al., submitted), large samples in primary care (Evans, Connell, Barkham, Marshall & Mellor-Clark, 2003; Mellor-Clark et al., 2001), in secondary care settings (Barkham et al., 2001), and both primary and secondary settings (Barkham, Gilbert, Connell, Marshall & Twigg, 2005), and with older adults (Barkham, Culverwell, Spindler, Twigg & Connell, 2005). Table 1 presents a guide to the publications on the development and psychometric properties of the CORE-OM and CORE System.

The CORE-OM as a tool in counselling and psychotherapy

Within each domain of the CORE-OM (except subjective well-being) there are clusters of items. The problem domain comprises four clusters (Depression, Anxiety, Physical, and Trauma) and the functioning domain comprises three clusters (General, Social, and Close). The risk domain comprises Risk to Self and Risk to Others. Evidence to date suggests that the internal consistency is good at both the domain and cluster level except for Physical problems and for Risk to Others. However, there is also evidence of strong interdependence between the domains with the exception of risk.

Invariably the measure is most commonly used to derive a single score. All published articles have consistently reported the mean item score for all items and also the mean item score for all the non-risk items, thereby providing practitioners with the options of including or excluding risk items. In addition, domain and, more recently, cluster scores have also been reported. Hence, the structure of the CORE-OM provides a range of options to practitioners in terms of which level of presentation they wish to use for their particular purpose.

Scoring the CORE-OM

When the CORE-OM was developed, the aim was for practitioners to calculate a mean item score – that is, to sum the total items marked and divide by 34 (if there were no missing items). This would yield a mean item total ranging from 0 to 4. However over the years feedback from practitioners has raised two issues. First, many practitioners simply add the items to generate a total score as this is easier than dividing by 34 (which is not the easiest of numbers to use). Second, some practitioners have found the 0–4 range for the score difficult to use because of the fractional nature of the resulting score (i.e., 1.83). It tends to be easier to assign meaning to whole numbers rather than to fractions of numbers. To take account of this feedback, we have begun to move towards a procedure of multiplying the mean item score by 10 and calling this a clinical score. None of this alters any of the psychometric properties of the measure (although the standard deviation also needs to be multiplied by 10). Procedures for scoring the CORE-OM are set out in Box 1 and a look-up table of total scores and equivalent clinical scores is presented in Box 2. However, the look-up table will only work if there are no missing items. When clients miss out items, the total needs to be divided by the number of items completed.

Relationship of the CORE-OM with other measures

A programme of work has been undertaken with the aim of establishing the relationship between the CORE-OM and other standard outcome measures.

CLINICAL OUTCOMES in ROUTINE EVALUATION OUTCOME MEASURE	Site ID <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> letters only numbers only Client ID <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Therapist ID <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> numbers only (1) <input type="text"/> <input type="text"/> numbers only (2) <input type="text"/> <input type="text"/> Sub codes <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> D D M M Y Y Y Y <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Date form given	Age <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Male <input type="checkbox"/> <input type="checkbox"/> Female <input type="checkbox"/> <input type="checkbox"/> Stage Completed S Screening R Referral A Assessment F First Therapy Session P Pre-therapy (unspecified) D During Therapy L Last therapy session X Follow up 1 Y Follow up 2	Stage <input type="checkbox"/> <input type="checkbox"/> Episode <input type="checkbox"/> <input type="checkbox"/>
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IMPORTANT – PLEASE READ THIS FIRST

This form has 34 statements about how you have been OVER THE LAST WEEK.
 Please read each statement and think how often you felt that way last week.
 Then tick the box which is closest to this.
 Please use a dark pen (not pencil) and tick clearly within the boxes.

Over the last week	Not at all	Only Occasionally	Sometimes	Often	Most or all the time	OFFICE USE ONLY
1 I have felt terribly alone and isolated	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	F
2 I have felt tense, anxious or nervous	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	P
3 I have felt I have someone to turn to for support when needed	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	F
4 I have felt O.K. about myself	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	W
5 I have felt totally lacking in energy and enthusiasm	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	P
6 I have been physically violent to others	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	R
7 I have felt able to cope when things go wrong	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	F
8 I have been troubled by aches, pains or other physical problems	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	P
9 I have thought of hurting myself	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	R
10 Talking to people has felt too much for me	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	F
11 Tension and anxiety have prevented me doing important things	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	P
12 I have been happy with the things I have done	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	F
13 I have been disturbed by unwanted thoughts and feelings	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	P
14 I have felt like crying	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	W

Please turn over

Over the last week	Not at all	Only Occasionally	Sometimes	Often	Most or all the time	OFFICE USE ONLY
15 I have felt panic or terror	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	P
16 I made plans to end my life	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	R
17 I have felt overwhelmed by my problems	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	W
18 I have had difficulty getting to sleep or staying asleep	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	P
19 I have felt warmth or affection for someone	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	F
20 My problems have been impossible to put to one side	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	P
21 I have been able to do most things I needed to	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	F
22 I have threatened or intimidated another person	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	R
23 I have felt despairing or hopeless	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	P
24 I have thought it would be better if I were dead	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	R
25 I have felt criticised by other people	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	F
26 I have thought I have no friends	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	F
27 I have felt unhappy	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	P
28 Unwanted images or memories have been distressing me	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	P
29 I have been irritable when with other people	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	F
30 I have thought I am to blame for my problems and difficulties	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	P
31 I have felt optimistic about my future	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	W
32 I have achieved the things I wanted to	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> 0	F
33 I have felt humiliated or shamed by other people	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	F
34 I have hurt myself physically or taken dangerous risks with my health	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	R

THANK YOU FOR YOUR TIME IN COMPLETING THIS QUESTIONNAIRE

Total Scores	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Mean Scores	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
(Total score for each dimension divided by number of items completed in that dimension)	(W)	(P)	(F)	(R)	All Items	All minus R

Figure 1. The CORE-OM.

This work has also helped us determine the meaning of CORE-OM scores. Hence, we have asked the question: How 'core' is the CORE-OM when com-

pared with other outcome measures such as the Beck Depression Inventory (BDI) and the Hamilton Rating Scale for Depression (see Cahill et al., in press) as well

Table I. Studies reporting on the development and psychometric properties of the CORE measures.

[illegible]

Box 1. Methods for scoring the CORE-OM**To obtain the mean item score**

Stage 1: Add the total score
 Stage 2: Divide by the number of client completed items (i.e., 34 if none are missing)
 Stage 3: Result is a mean item score ranging from 0 to 4
 Example: A total score of 58 divided by 34 = 1.71

To obtain the clinical score**Method A: Using the mean score**

Stage 1: Calculate the mean score (as above)
 Stage 2: Multiply the mean score by 10
 Stage 3: Result is a clinical score ranging from 0 to 40
 Example: A total score of 58 divided by 34 = 1.71 multiplied by 10 = 17.1

Method B: Using the look up tables

Stage 1: Add the total score
 Stage 2: Refer to look-up table (Box 2) to convert to clinical score
 Example: A total score of 58 = 17.1

Method C: Easy estimate method

Stage 1: Add the total score
 Stage 2: Divide the total score by 10
 Stage 3: Multiply this score by 3
 Example: A total score of 58 divided by 10 = 5.8 and multiplied by 3 = 17.4. The look up table (Box 2) shows that the actual clinical score is 17.1. Hence, the estimate of 17.4 is fairly close to the true score when working at a practical level and wanting to have an immediate sense of the score.

as the Health of the Nation Outcome Scales (see Leach et al., 2005). Moreover, look-up transformation tables have been established for converting BDI scores into CORE-OM scores and *vice versa* (Leach et al., in press). In effect, we can now 'rewire' archived efficacy trials that used the BDI with transformed CORE-OM scores so that these studies have more immediate relevance to practitioners using the CORE-OM in routine practice (Barkham et al., 2005). In this way, there is a possibility of developing a 'core' language in which efficacy and practice-based studies can be directly compared.

The meaning of CORE-OM scores

We have used a range of information from the above programme of work including distribution of scores in several very large data sets, comparisons with BDI scores, and feedback from practitioners, to arrive at suggested guidelines on the meaning of CORE-OM scores (see Box 2).

The severity bands set out in Box 2 derive from recent work in which the cut-off between the clinical and non-clinical populations has been established as a clinical score of 10, equivalent to a mean item score of 1.0 (Connell et al., submitted). This cut-off score is slightly lower than previously reported and is discussed in more detail later. However, by adopting 10 as the cut-off, we have identified two bands within the non-clinical range called 'healthy' and 'low' level of distress. People may score on a number of items at any particular time but still remain 'healthy'. Similarly, people may score in the 'low' range which might be a result of raised pressures or particular circumstances but the score is still within the range of the general population. We have

identified the score of 10 as the lower boundary of the 'mild' level, 15 for the moderate level, and 20 for the moderate-to-severe level. A score of 25 or over marks the severe level.

Evaluating change

Having provided guidance on the meaning of CORE-OM scores, it is important to establish the extent of change required in order for someone to be considered as having made meaningful improvement. Following the procedures identified by Neil Jacobson and colleagues (for details, see Jacobson & Truax, 1991), two components are central to determining meaningful change: reliable change, and clinically significant change.

Reliable change index

The reliable change index (RCI) reflects the extent of change in a measure that might be expected by chance alone or measurement error. Hence, when looking at pre-post change, practitioners need to know whether the change achieved exceeds this given level. To date, we have used an RCI of .48 for the CORE-OM. Rounding this to .50 would yield a clinical score of 5. Hence, to be confident of a client making reliable change, we would be looking for changes greater than 5 in the clinical score (or .5 using the mean item scoring method). Interestingly, all the 'clinical' severity levels with the exception of 'severe' have a range of 5 points. So, if a person scores at the upper end of, for example, moderate (i.e., 19) and they meet the criterion for reliable change (i.e., improve by at least 5 points), then they will also move from the 'moderate' to at least the

Box 2. Look-up table of CORE-OM scores and severity levels											
Non-clinical range				Clinical range							
Total score	Clinical Score	Simple score	Severity Level	Mild, Moderate, Moderate-to-severe				Severe			
				Total score	Clinical Score	Simple score	Severity Level	Total score	Clinical Score	Simple score	Severity Level
1	0.3	0	Healthy	Clinical cut-off level				85	25.0	25	Severe level
2	0.6			34	10.0	10	Mild level	86	25.3		
3	0.9			35	10.3			87	25.6		
4	1.2	36		10.6	88			25.9			
5	1.5	1		37	10.9	11		89	26.2	26	
6	1.8			38	11.2			90	26.5		
7	2.1			39	11.5			91	26.8		
8	2.4	2		40	11.8	12		92	27.1	27	
9	2.6			41	12.1			93	27.4		
10	2.9			42	12.4			94	27.6		
11	3.2	3		43	12.6	13		95	27.9	28	
12	3.5			44	12.9			96	28.2		
13	3.8			45	13.2			97	28.5		
14	4.1	4		46	13.5	14		98	28.8	29	
15	4.4			47	13.8			99	29.1		
16	4.7			48	14.1			100	29.4		
17	5.0	5		49	14.4	15	101	29.7	30		
18	5.3			50	14.7		102	30.0			
19	5.6			51	15.0		103	30.3			
20	5.9	6		52	15.3	16	104	30.6	31		
21	6.2		53	15.6	105		30.9				
22	6.5		54	15.9	106		31.2				
23	6.8	7	55	16.2	17	107	31.5	32			
24	7.1		56	16.5		108	31.8				
25	7.4		57	16.8		109	32.1				
26	7.6	8	58	17.1	18	110	32.4	33			
27	7.9		59	17.4		111	32.6				
28	8.2		60	17.6		112	32.9				
29	8.5	9	61	17.9	19	113	33.2	34			
30	8.8		62	18.2		114	33.5				
31	9.1		63	18.5		115	33.8				
32	9.4	9	64	18.8	20	116	34.1	35			
33	9.7		65	19.1		117	34.4				
<div>Guidance notes</div> <div>1. The original mean item score can be readily calculated by dividing the clinical score by 10.</div> <div>2. The 'simple' score uses the first integer only of the clinical score as a rough guide.</div> <div>3. The reliable change index is 5 points and the cut-off level is a clinical score of 10 (or .5 and 1 respectively if using the traditional scoring method).</div>				66		19.4	21		118	34.7	
				67	19.7	119		35.0			
				68	20.0	22		120	35.3	37	
				69	20.3		23	121	35.6		
				70	20.6			122	35.9		
				71	20.9	24		123	36.2	38	
				72	21.2		25	124	36.5		
				73	21.5			125	36.8		
				74	21.8	126		37.1			
				75	22.1	26	127	37.4	39		
				76	22.4		128	37.6			
				77	22.6		129	37.9			
				78	22.9	27	130	38.2	40		
				79	23.2		131	38.5			
				80	23.5		132	38.8			
				81	23.8	28	133	39.1	41		
				82	24.1		134	39.4			
				83	24.4		135	39.7			
				84	24.7	29	136	40.0	42		
				85	25.0		137	40.3			
86	25.3	138	40.6								
87	25.6	30	139	40.9	43						
88	25.9		140	41.2							
89	26.2		141	41.5							
90	26.5	31	142	41.8	44						
91	26.8		143	42.1							
92	27.1		144	42.4							
93	27.4	32	145	42.7	45						
94	27.6		146	43.0							
95	27.9		147	43.3							
96	28.2	33	148	43.6	46						
97	28.5		149	43.9							
98	28.8		150	44.2							
99	29.1	34	151	44.5	47						
100	29.4		152	44.8							
101	29.7		153	45.1							
102	30.0	35	154	45.4	48						
103	30.3		155	45.7							
104	30.6		156	46.0							
105	30.9	36	157	46.3	49						
106	31.2		158	46.6							
107	31.5		159	46.9							
108	31.8	37	160	47.2	50						
109	32.1		161	47.5							
110	32.4		162	47.8							
111	32.6	38	163	48.1	51						
112	32.9		164	48.4							
113	33.2		165	48.7							
114	33.5	39	166	49.0	52						
115	33.8		167	49.3							
116	34.1		168	49.6							
117	34.4	40	169	49.9	53						
118	34.7		170	50.2							
119	35.0		171	50.5							
120	35.3	41	172	50.8	54						
121	35.6		173	51.1							
122	35.9		174	51.4							
123	36.2	42	175	51.7	55						
124	36.5		176	52.0							
125	36.8		177	52.3							
126	37.1	43	178	52.6	56						
127	37.4		179	52.9							
128	37.6		180	53.2							
129	37.9	44	181	53.5	57						
130	38.2		182	53.8							
131	38.5		183	54.1							
132	38.8	45	184	54.4	58						
133	39.1		185	54.7							
134	39.4		186	55.0							
135	39.7	46	187	55.3	59						
136	40.0		188	55.6							
137	40.3		189	55.9							
138	40.6	47	190	56.2	60						
139	40.9		191	56.5							
140	41.2		192	56.8							
141	41.5	48	193	57.1	61						
142	41.8		194	57.4							
143	42.1		195	57.7							
144	42.4	49	196	58.0	62						
145	42.7		197	58.3							
146	43.0		198	58.6							
147	43.3	50	199	58.9	63						
148	43.6		200	59.2							
149	43.9		201	59.5							
150	44.2	51	202	59.8	64						
151	44.5		203	60.1							
152	44.8		204	60.4							
153	45.1	52	205	60.7	65						
154	45.4		206	61.0							
155	45.7		207	61.3							
156	46.0	53	208	61.6	66						
157	46.3		209	61.9							
158	46.6		210	62.2							
159	46.9	54	211	62.5	67						
160	47.2		212	62.8							
161	47.5		213	63.1							
162	47.8	55	214	63.4	68						
163	48.1		215	63.7							
164	48.4		216	64.0							
165	48.7	56	217	64.3	69						
166	49.0		218	64.6							
167	49.3		219	64.9							
168	49.6	57	220	65.2	70						
169	49.9		221	65.5							
170	50.2		222	65.8							
171	50.5	58	223	66.1	71						
172	50.8		224	66.4							
173	51.1		225	66.7							
174	51.4	59	226	67.0	72						
175	51.7		227	67.3							
176	52.0		228	67.6							
177	52.3	60	229	67.9	73						
178	52.6		230	68.2							
179	52.9		231	68.5							
180	53.2	61	232	68.8	74						
181	53.5		233	69.1							
182	53.8		234	69.4							
183	54.1	62	235	69.7	75						
184	54.4		236	70.0							
185	54.7		237	70.3							
186	55.0	63	238	70.6	76						
187	55.3		239	70.9							
188	55.6		240	71.2							
189	55.9	64	241	71.5	77						
190	56.2		242	71.8							
191	56.5		243	72.1							
192	56.8	65	244	72.4	78						
193	57.1		245	72.7							
194	57.4		246	73.0							
195	57.7	66	247	73.3	79						
196	58.0		248	73.6							
197	58.3		249	73.9							
198	58.6	67	250	74.2	80						
199	58.9		251	74.5							
200	59.2		252	74.8							
201	59.5	68	253	75.1	81						
202	59.8		254	75.4							
203	60.1		255	75.7							
204	60.4	69	256	76.0	82						
205	60.7		257	76.3							
206	61.0		258	76.6							
207	61.3	70	259	76.9	83						
208	61.6		260	77.2							
209	61.9		261	77.5							
210	62.2	71	262	77.8	84						
211	62.5		263	78.1							
212	62.8		264	78.4							
213	63.1	72	265	78.7	85						
214	63.4		266	79.0							
215	63.7		267	79.3							
216	64.0	73	268	79.6	86						
217	64.3		269	79.9							
218	64.6		270	80.2							
219	64.9	74	271	80.5	87						
220	65.2		272	80.8							
221	65.5		273	81.1							
222	65.8	75	274	81.4	88						
223	66.1		275	81.7							
224	66.4		276	82.0							
225	66.7	76	277	82.3	89						
226	67.0		278	82.6							
227	67.3		279	82.9							
228	67.6	77	280	83.2	90						
229	67.9		281	83.5							
230	68.2		282	83.8							
231	68.5	78	283	84.1	91						
232	68.8		284	84.4							
233	69.1		285	84.7							
234	69.4	79	286	85.0	92						
235	69.7		287	85.3							
236	70.0		288	85.6							
237	70.3	80	289	85.9	93						
238	70.6		290	86.2							
239	70.9		291	86.5							
240	71.2	81	292	86.8	94						
241	71.5		293	87.1							
242	71.8		294	87.4							
243	72.1	82	295	87.7	95						
244	72.4		296	88.0							
245	72.7		297	88.3							
246	73.0	83	298	88.6	96						
247	73.3		299	88.9							
248	73.6		300	89.2							
249	73.9	84	301	89.5	97						
250	74.2		302	89.8							
251	74.5		303	90.1							
252	74.8	85	304	90.4	98						
253	75.1		305	90.7							
254	75.4		306	91.0							
255	75.7	86	307	91.3	99						
256	76.0		308	91.6							
257	76.3		309	91.9							
258	76.6	87	310	92.2	100						
259	76.9		311	92.5							
260	77.2		312	92.8							
261	77.5	88	313	93.1	101						
262	77.8		314	93.4							
263	78.1		315	93.7							
264	78.4	89	316	94.0	102						
265	78.7		317	94.3							
266	79.0		318	94.6							
267	79.3	90	319	94.9	103						
268	79.6		320	95.2							
269	79.9		321	95.5							
270	80.2	91	322	95.8	104						
271	80.5		323	96.1							
272	80.8		324	96.4							
273	81.1	92	325	96.7	105						
274	81.4		326	97.0							
275	81.7		327	97.3							
276	82.0	93	328	97.6	106						
277	82.3		329	97.9							
278	82.6		330	98.2							
279	82.9	94	331	98.5	107						
280	83.2		332	98.8							
281	83.5		333	99.1							
282	83.8	95	334	99.4	108						
283	84.1		335	99.7							
284	84.4		336	100.0							
285	84.7	96	337	100.3	109						
286	85.0		338	100.6							
287	85.3		339	100.9							
288	85.6	97	340	101.2	110						
289	85.9		341	101.5							
290	86.2		342								

'mild' level. In other words, apart from scores in the severe level, achieving reliable change (i.e., improvement) is reflected in a change (i.e., lowering) of severity level.

Clinical cut-offs

A body of work on the CORE-OM measure has identified certain clinical cut-off scores which

are indicative of membership of non-clinical and clinical populations. The originally reported mean item cut-off scores using a combined sample of convenience and students are 1.19 for men and 1.29 for women (Evans et al., 2002). Transposing these to clinical scores (11.9 and 12.9) – and rounding up for ease of practical use – yields scores of 12 and 13 respectively. As indicated above, more recent work has established a cut-off score

of 10 between the clinical and general population and that this applies both to men and women (Connell et al., submitted). The score of 10 is somewhat easier to work with in busy routine settings and saves separate calculations for male and female clients. Hence we are slowly moving towards adopting this score as the cut-off level because of its relative ease of use. The lower cut-off score of 10 means that more clients are included in the clinical sample for a service but it also requires, by definition, a lower score than previously for a client to meet clinical improvement. When all clients referred to a service are considered, the difference arising from selecting the original or newer cut-off score is relatively small but differences will occur when the cut-off score itself is used to select clients (see Mullin, Barkham, Mothersole, Bewick & Kinder, 2006).

The family of CORE measures

Outcome measures are designed following a key principle – namely that they are fit for purpose – and we have set out in Figure 2 a map of the current derivatives of the CORE-OM (solid boxes) and have also included planned versions for additional specific purposes (broken boxes). For assessment and outcome, the full CORE-OM is recommended. It is also worth noting that the full version can be used without the risk items (i.e., CORE-NR) and all publications include information on this version.

For repeated administration (i.e., session-by-session), two parallel short forms, each comprising

differing but overlapping combinations of 18 items, have also been developed which have been shown to have high levels of concurrent validity with the BDI-II (Cahill et al., in press). These versions were particularly designed for research studies where the objectives required administration of the alternate A and B short forms in order to reduce memory effects. Again, for ease of use in everyday routine settings, it is likely that a single, simpler and even shorter measure, more akin to a thermometer, might be appropriate for monitoring progress in routine practice. As moves increase towards tracking session-by-session change, then the original measure needs to be adapted for these specific purposes. No single version of a measure can be expected to be fit for all purposes.

The third portion of the map covers the non-clinical population and there is a version for use in the general population, named GP-CORE, comprising 14 items derived from the CORE-OM (Sinclair, Barkham, Evans, Connell & Audin, 2005).

Finally, versions are in development for particular groups of people. For example, a version for young people (named YP-CORE) is well advanced and there is a programme of work in progress focusing on developing translations of the CORE-OM for ethnic groups and European languages.

The CORE system

Notwithstanding the major component of measuring outcomes, the CORE-OM is but one part of the broader CORE System. The CORE System was developed by a

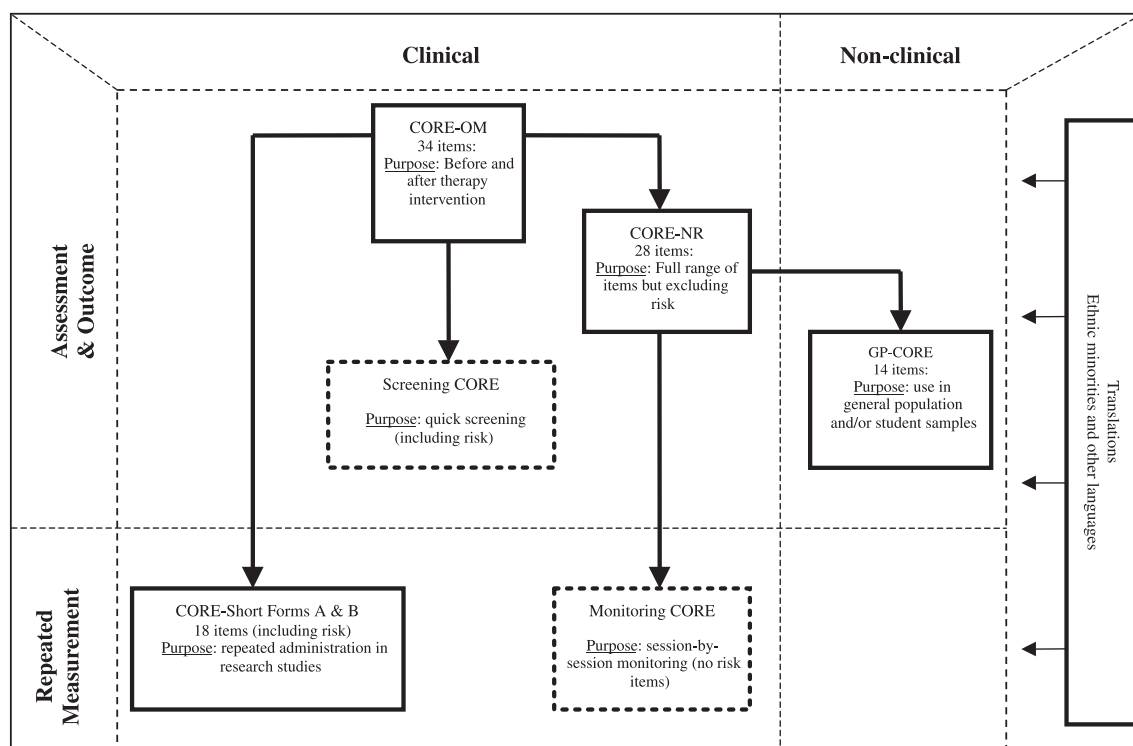


Figure 2. Map of the CORE family of measures.

multidisciplinary group of practitioners and researchers and the content of the system was informed by extensive collaboration with practitioners, managers, and service commissioners (Mellor-Clark, Barkham, Connell & Evans, 1999). The system comprises three tools, sharing the onus of evaluation data provision equally between clients completing the CORE-OM pre- and post-therapy, and practitioners completing the CORE Assessment Form at pre-therapy and End of Therapy Form at post-therapy.

To complement the CORE-OM and provide client contextual detail, the double-sided CORE Therapy Assessment Form (see Figure 3) captures a 'core' set of contextual information that aids the quality of both client assessment and overall service development (Mellor-Clark et al., 1999). To enhance client assessment, the form collects important contextual information including client support, previous/concurrent attendance for psychological therapy and medication, as well as a categorisation system to record presenting difficulties, their impact on day-to-day functioning, and any associated risk. To aid the development of service quality, the form collects data on critical assessment audit items that profile the accessibility and appropriateness of service provision. These include client demographics, waiting times, and the suitability of referral.

Finally, for client discharge, the CORE End of Therapy Form (see Figure 4) complements the other components by capturing a 'core' set of treatment descriptors that aid the interpretation of CORE-OM scores which in turn helps to contextualize therapy outcomes and inform service development. The form collects profile information that includes therapy length, type of intervention, modality, and frequency. To enhance the development of service quality, the form collects data on critical discharge audit items that profile the effectiveness and efficiency of service provision. These include problem and risk review, therapy benefits, session attendance rates, and therapy ending (i.e., planned or unplanned).

As described in the following paper in this special edition of *CPR* (Mellor-Clark, Curtis Jenkins, Evans, Mothersole & McInnes, 2006), full CORE System data as outlined above can be managed by CORE-PC which is a bespoke standardized software package designed to help services analyse and report on their data as and when required. Alternatively, services can obviously adopt their own in-house approaches to analyses and reporting.

Practice based evidence

With the development of a robust tool kit as outlined above, the focus of work has moved towards the activity of building a practice based evidence for counselling and the psychological therapies. Since the 1980s, the paradigm of evidence based practice has been growing in dominance and, while this process has undoubtedly contributed much in providing clear evidence of what works and for whom, there is

always unease where one paradigm is dominant. Accordingly, in recent years, a complementary paradigm has emerged, namely practice-based evidence (Barkham & Mellor-Clark, 2000; Margison et al., 2000).

A core principle of a practice-based approach is that evidence must indeed be "*practice-based*" – that is, it must be shown that the procedures work and are effective in improving the quality of patient care in real-life practice settings. Moreover, practice is the core driver of the process – driven by practitioners' and managers' desires to provide a quality service to their clients. At this level, the issue of *ownership* of the research activity by practitioners becomes crucial as they strive to innovate and generate solutions to local service delivery issues.

Two key components are central to the practice-based paradigm: effectiveness and practice (Barkham & Mellor-Clark, 2003). The effectiveness component addresses the generalisability of results across particular services and settings. For example, the ability of a local service to profile itself against comparative national information across key delivery indicators provides invaluable information in terms of providing a fuller understanding of how a service is performing. The practice component addresses the analysis of results within a service or setting whereby a service looks at its own data to see if there are differences in relation to particular groupings of clients, practitioners, presenting problems, or other foci. Importantly, the philosophy of practice-based evidence is aimed at enhancing the quality of the intervention or care provided by the practitioner, rather than as an explicit tool for service managers to plan their service.

However, it is important not to view these two paradigms as competitive. Our view is that they are complementary in that the knowledge base for counselling and the psychological therapies is considerably stronger if each paradigm informs the other (see Barkham & Margison, in press; Barkham & Mellor-Clark, 2003).

Scoping review of applications

Since its launch, we believe the CORE-OM has become one of the most widely used outcome measures in the psychological therapies in the UK. There are a range of potential explanations for this, but the fact that the System (or any of its component parts) can be freely photocopied (but not altered in any way) without breaching its copyright status, and the range of practical support resources (e.g., free advice, implementation training, software, and benchmarking etc.) available to users have no doubt all played a significant part.

The clinical governance and clinical effectiveness agendas in the NHS emphasise the need for routine service evaluation (Department of Health, 2004). In order to carry forward these agendas, services require accessible, affordable, valid, and reliable measures. Also, practitioners are more likely to engage in routine

CLINICAL OUTCOMES in ROUTINE EVALUATION THERAPY ASSESSMENT FORM v.2	Site ID <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Age <input type="text"/> <input type="text"/>	
	Client ID <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Male <input type="checkbox"/> Female <input type="checkbox"/>	
	Sub Codes <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> TH ID number <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> SC2 numbers <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> SC3 numbers <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
	Referrer(s) <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Employment <input type="checkbox"/> <input type="checkbox"/> Ethnic Origin <input type="checkbox"/> <input type="checkbox"/>	

Referral date <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	First assessment date attended <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Last assessment date <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Total number of assessments <input type="text"/>
Previously seen for therapy in this service? Yes <input type="checkbox"/> No <input type="checkbox"/>			Episode <input type="checkbox"/>
Months since last episode <input type="text"/> <input type="text"/>			Is this a follow-up/review appointment? Yes <input type="checkbox"/> No <input type="checkbox"/>

Relationships/support <i>Please tick as many boxes as appropriate</i>	
<input type="checkbox"/> Living alone (not including dependents)	<input type="checkbox"/> Full time carer (of disabled/elderly etc)
<input type="checkbox"/> Living with partner	<input type="checkbox"/> Living in shared accommodation (e.g. lodgings)
<input type="checkbox"/> Caring for children under 5 years	<input type="checkbox"/> Living in temporary accommodation (e.g. hostel)
<input type="checkbox"/> Caring for children over 5 years	<input type="checkbox"/> Living in institution/hospital
<input type="checkbox"/> Living with parents/guardian	<input type="checkbox"/> Other <input type="checkbox"/> <input style="width: 100px;" type="text"/>
<input type="checkbox"/> Living with other relatives/friends	

Current/previous use of services for psychological problems? <i>Please tick as many boxes as appropriate</i>			
Primary GP or other member of primary care team (eg practice nurse, counsellor) ...	Concurrent	< 12 mths	> 12 mths
Secondary In primary care setting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In community setting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In hospital setting on sessional basis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Day care services (e.g. day hospital)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hospital admission <=10 days	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hospital admission >=11 days	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Specialist Psychotherapy/psychological treatments from specialist team (sessional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Attendance at day therapeutic programme	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inpatient treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Counsellor in eg voluntary, religious, work, educational setting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Is the client currently prescribed medication to help with their psychological problem(s)? Yes <input type="checkbox"/> No <input type="checkbox"/>		
If yes, please indicate type of medication:		
<input type="checkbox"/> Anti-psychotics (neuroleptics/major tranquillizers)	<input type="checkbox"/> Anti-depressants	<input type="checkbox"/> Anxiolytics/Hypnotics (minor tranquillizers)
<input type="checkbox"/> Other		

Brief description of reason for referral <input style="width: 100%;" type="text"/>	
--	--

Identified Problems/Concerns											
severity		<6 months	6-12 months	> 12 months	Recurring/continuous	severity		<6 months	6-12 months	> 12 months	Recurring contin.
<input type="checkbox"/> Depression		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Trauma/abuse		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Anxiety/Stress		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Bereavement/loss		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Psychosis		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Self esteem		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Personality Problems		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Interpersonal/relationship		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Cognitive/Learning		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Living/Welfare		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Eating Disorder		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Work/Academic		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Physical Problems		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other (specify below)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Addictions		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input style="width: 100%;" type="text"/>					

Risk			
	None	Mild	Mod
<input type="checkbox"/> Suicide	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Self Harm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Harm to others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Legal/Forensic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ICD-10 CODES			
F/Z Main Code Sub-code 1 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	F/Z Main Code Sub-code 3 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	F/Z Main Code Sub-code 2 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	F/Z Main Code Sub-code 4 <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

What has the client done to cope with/avoid their problems? Please tick, and then specify actions	
Positive actions <input type="checkbox"/> <input style="width: 100%;" type="text"/>	Negative actions <input type="checkbox"/> <input style="width: 100%;" type="text"/>

Assessment outcome (tick one box only) <input type="checkbox"/> Assessment/one session only <input type="checkbox"/> Accepted for therapy <input type="checkbox"/> Accepted for trial period of therapy	*If the client is not entering therapy give brief reason <input style="width: 100%;" type="text"/>
---	--

Figure 3. The Therapy Assessment Form (TAF).

evaluation if the measures provide clinically meaningful information. Using the same measures across services both allows and promotes benchmarking

(Barkham et al., 2001; Mellor-Clark, 2001) and provides practice based evidence to complement evidence from efficacy studies and “a framework

CLINICAL OUTCOMES in ROUTINE EVALUATION END OF THERAPY FORM v.2	Site ID	<input type="text"/>	Number of sessions planned	<input type="text"/>
	Client ID	letters <input type="text"/> numbers <input type="text"/>		
	Sub Codes	Therapist ID <input type="text"/> SC4 numbers <input type="text"/> SC5 numbers <input type="text"/>	Number of sessions attended	<input type="text"/>
	Date therapy commenced	D D M M Y Y Y Y <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Number of sessions unattended	<input type="text"/>
	Date therapy completed	D D M M Y Y Y Y <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		

What type of therapy was undertaken with the client? <i>Please tick as many boxes as appropriate</i>			
Psychodynamic	<input type="checkbox"/>	Person-centred	<input type="checkbox"/>
Psychoanalytic	<input type="checkbox"/>	Integrative	<input type="checkbox"/>
Cognitive	<input type="checkbox"/>	Systemic	<input type="checkbox"/>
Behavioural	<input type="checkbox"/>	Supportive	<input type="checkbox"/>
Cognitive/Behavioural	<input type="checkbox"/>	Art	<input type="checkbox"/>
Structured/Brief	<input type="checkbox"/>	Other (specify below)	<input type="checkbox"/>
<input type="text"/>			

What modality of therapy was undertaken with the client? <i>Please tick as many boxes as appropriate</i>			
Individual	<input type="checkbox"/>	Family	<input type="checkbox"/>
Group	<input type="checkbox"/>	Marital/Couple	<input type="checkbox"/>

What was the frequency of therapy with the client?			
More than once weekly	<input type="checkbox"/>	Less than once weekly	<input type="checkbox"/>
Weekly	<input type="checkbox"/>	Not at a fixed frequency	<input type="checkbox"/>

Which of the following best describes the ending of therapy?			
Unplanned <input type="checkbox"/>		Planned <input type="checkbox"/>	
Due to crisis	<input type="checkbox"/>	Planned from outset	<input type="checkbox"/>
Due to loss of contact	<input type="checkbox"/>	Agreed during therapy	<input type="checkbox"/>
Client did not wish to continue	<input type="checkbox"/>	Agreed at end of therapy	<input type="checkbox"/>
Other unplanned ending (specify below)	<input type="checkbox"/>	Other planned ending (specify below)	<input type="checkbox"/>
<input type="text"/>		<input type="text"/>	

Review of Identified Problems/Concerns			
Severity	Therapy issue	Severity	Therapy issue
<input type="checkbox"/> Depression	<input type="checkbox"/>	<input type="checkbox"/> Trauma/Abuse	<input type="checkbox"/>
<input type="checkbox"/> Anxiety/Stress	<input type="checkbox"/>	<input type="checkbox"/> Bereavement/Loss	<input type="checkbox"/>
<input type="checkbox"/> Psychosis	<input type="checkbox"/>	<input type="checkbox"/> Self esteem	<input type="checkbox"/>
<input type="checkbox"/> Personality Problems	<input type="checkbox"/>	<input type="checkbox"/> Interpersonal/relationship	<input type="checkbox"/>
<input type="checkbox"/> Cognitive/Learning	<input type="checkbox"/>	<input type="checkbox"/> Living/Welfare	<input type="checkbox"/>
<input type="checkbox"/> Physical Problems	<input type="checkbox"/>	<input type="checkbox"/> Work/Academic	<input type="checkbox"/>
<input type="checkbox"/> Eating Disorder	<input type="checkbox"/>	<input type="checkbox"/> Other (specify below)	<input type="checkbox"/>
<input type="checkbox"/> Addictions	<input type="checkbox"/>	<input type="text"/>	

Risk		Contextual Factors	
	None Mild Mod Sev		Poor Moderate Good
Suicide	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Motivation	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Self Harm	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Working Alliance	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Harm to others	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Psychological Mindedness	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Legal/Forensic	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		

Benefits of Therapy			
	Improved Yes No	Not addressed	
Personal insight/understanding	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	Control/planning/decision making
Expression of feelings/problems	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	Subjective well-being
Exploration of feelings/problems	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	Symptoms
Coping strategies/techniques	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	Day to day functioning
Access to practical help	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	Personal relationships
Other benefits	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	
Tick box and then specify below			
<input type="text"/>			

Has contact with this service resulted in a change of medication? Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable <input type="checkbox"/>			
If yes, is this change likely to be of benefit to the client? Yes <input type="checkbox"/> No <input type="checkbox"/>			
Details of change: Started <input type="checkbox"/> Discontinued <input type="checkbox"/> Increased <input type="checkbox"/> Decreased <input type="checkbox"/> Modified <input type="checkbox"/>			

Has the client been given a follow-up appointment?		Number of months until appointment	
Yes <input type="checkbox"/>	No <input type="checkbox"/>	<input type="text"/>	

Figure 4. The End of Therapy form.

for using local evidence to support practice'' (Department of Health, 2004, p. 29). Practice-based evidence can also be used within services to feed data back to practitioners that will inform their practice and inform

clients of their progress (Lucock et al., 2003). Table II summarises studies carried out using the CORE-OM or CORE System. This list is derived from broad stream searches of the literature with particular reference to

Table II. Studies reporting on the use and applications of the CORE measures

	Development of other measures	Evidence-based practice (i.e., trials)	Practice-based evidence		
			Routine setting	Bench-marking	Survey
CORE-OM & CORE-SF					
Ashworth et al., 2005	✓				
Barkham et al., 2001			✓	✓	
Barkham et al., 2005		✓			
Barkham et al., in press			✓		
Baylis & Farquharson, 2005			✓		
Branney & Barkham, in press			✓		
Cavanagh et al., in press			✓		
Cooper et al., 2003		✓			
Davies et al., in press			✓		
Dent-Brown & Wang, 2004	✓				
Ekers & Lovell, 2002			✓		
Evans et al., 2003			✓	✓	
Gardiner et al., 2003			✓		
Gilbert et al., in press			✓	✓	
Greasley & Small, 2005			✓		
Hall & Mullee, 2000			✓		
Hardy et al., 2005			✓		
Howey & Ormrod, 2002			✓		
Leach et al., 2004			✓		
Lovell et al., 2003			✓		
Lucock et al., 2003			✓		
Lutz et al., 2005			✓		
McCloskey, 2001			✓		
Mellor-Clark et al., 2001			✓		
Mellor-Clark, 2001			✓		
Mellor-Clark, 2002			✓		
Mellor-Clark, 2003			✓		
Mellor-Clark, 2004				✓	
Morris & Isaacson, 2005			✓		
Richards et al., 2003		✓			
Royal College of Nursing, 2002					✓
Shepherd et al., submitted			✓		
Stiles et al., 2003			✓		
Stiles et al., in press			✓		
Whewell & Bonanno, 2000			✓		
Winter et al., 2003			✓		
GP-CORE					
Cooke et al., in press			✓		

more service oriented sources. It is not claimed to be comprehensive as there is likely to be work that is currently 'in press' or 'submitted' of which we are unaware. We have not included work that is currently 'in preparation'. Table II shows the majority of the work to be in the area of routine practice which is, in effect, a validation of the initial aims of developing the CORE-OM and CORE System.

Future directions

A huge amount of research and development has been invested in the CORE-OM, its derivatives, and the CORE System and this investment continues in key areas. One of these relates to harnessing the increasing availability of reliable information technology and the internet to develop more robust ways of collecting data and also of feeding back data to services and individual practitioners. Other developments involve looking at the relationship between the CORE System and its components with, for example, the delivery of

stepped care in the management of depression. These examples highlight moves towards utilising technology where this helps in supporting the infrastructure and also viewing the CORE System as integral to the planning and delivery of models of care. In this way, we are addressing the perennial problems of (a) collecting data but being unable to have the resources to do anything with it, and (b) seeing outcomes measurement as just an 'add on' to service delivery rather than being central to the planning and delivering of a quality service to clients. Further discussion on these and other issues are outlined in the following paper to this special edition of *CPR* (Mellor-Clark, Curtis Jenkins, Evans, Mothersole & McInnes, 2006).

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