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# Effective and Efficient: Using Patient-Led Appointment Scheduling in Routine Mental Health Practice in Remote Australia

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Patient-led appointment scheduling is a form of responsive regulation in which patients schedule their own psychotherapy appointments within the constraints of available resources. Of 92 patients referred to a clinical psychology clinic in the public mental health service of a remote country town in Australia, 51 attended more than 1 appointment ( $M = 3.6$ ; median = 3; range = 2–11). The average number of missed and cancelled appointments was between 0 and 1.1. As compared with reported results of other practice-based studies, this approach to treatment scheduling was equivalently effective (in terms of effect size) and substantially more efficient (in terms of effect size achieved per session attended). Patient-led regulation of treatment parameters holds promise in a context of heavy demands and limited resources in mental health services.

**Keywords:** patient-led, responsive regulation, conflict, Method of Levels, efficiency ratio

Whereas psychological treatments in public mental health services are routinely offered for a limited number of regularly scheduled appointments (e.g., 12 weekly sessions), psychological change typically follows an unpredictable and nonlinear course (e.g., Carey, 2011b; Hayes, Laurenceau, Feldman, Strauss, & Cardaciotto, 2007). Clinicians and patients have different expectations of treatment length. For example, Pekarik and Wierzbicki (1986) reported that “65% of therapists, preferred, but only 12% of clients expected, over 15 therapy sessions” (p. 534). Yet managers seem to fear that if patients were given unlimited access to a service that they would overuse the service, straining finite re-

sources; a fear that seems implicit in rules that cap numbers of sessions at a predetermined maximum. On the other hand, Falkenström (2010) suggested that naturalistic studies demonstrate that “patients in clinical practice received too few sessions to generate clinically significant improvements to the same degree as clinical trials” (p. 182). Treatment drop-outs are often defined as people who cease attending treatment before a prescribed or agreed end has been reached (e.g., Westbrook & Kirk, 2005). Wierzbicki and Pekarik (1993) commented that “the very concept of *dropout* stems from therapists’ judgments that some clients terminate inappropriately from therapy” (p. 193).

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Randomized controlled trials (RCTs) of psychological treatment deliver fixed schedules of predetermined numbers of sessions and clinical guidelines endorse this habit. For example, Watkins et al. (2011) reported a 12-session RCT of rumination-focused cognitive behavior therapy for residual depression, and Westin et al. (2011) reported a 10-session RCT of Acceptance and Commitment Therapy for tinnitus. The United Kingdom National Institute for Health and Clinical Excellence (NICE) recommend that, "For all people with depression having individual CBT, the duration of treatment should typically be in the range of 16 to 20 sessions over three to four months" (NICE, 2009, p. 28). But designing treatments of 10, 12, 16, or any fixed number of sessions is at odds with what is known about patient attendance patterns in routine clinical practice. Most patients attend therapy for a small number of sessions, with a few patients requiring many more sessions (Carey, 2011a). For example, Glover, Webb, and Evison (2010) reported in the evaluation of the first year of the Improving Access to Psychological Therapies in the United Kingdom that the "numbers of treatment sessions were surprisingly low" (p. 23). In this study only 1.38% of the 7,825 patients for whom data were available attended 16 or more treatment sessions with the median number of appointments being less than 10. Similarly Carey (2005) reported the results of an 18-month practice-based evaluation in which 98 patients scheduled one or more appointments. The median number of sessions attended was approximately four and the range of attended appointments was from one to 22. Only one person attended 22 sessions. Using sampling methodology an average number of 3.9 appointments was calculated as the mean treatment length in a sample of 3,021 closed files in one large clinical psychology department (Carey, 2006a). Also, Clement (2008) reported the results of a 40-year evaluation of independent practice ( $n = 1,374$ ) in which the mean number of sessions was 17.4 and the range was from 1 to 344 sessions. Patients and therapists appear to regulate treatment duration responsively, continuing treatment therapy only until they have achieved a "good enough level" of change (Barkham et al., 2006, 1996; Stiles, Barkham, Connell, & Mellor-Clark, 2008a). Scamardo, Bobele, and Biever (2004) proposed that treatment dropouts should, perhaps, be reconceptualized as self-terminators, acknowledging the possibility that patients may receive the help they need and make informed decisions to discontinue therapy at an earlier stage than clinicians expect.

### Patient-Led Appointment Scheduling

In the patient-led approach, therapy is conceptualized as a resource patients access as required to reduce psychological distress and achieve a greater sense of control and satisfaction in their lives. Patients schedule appointments on an ad hoc basis in much the same way that they schedule general practitioner (GP) appointments, physiotherapy services, or chiropractic care. Rather than receiving a predetermined dose of therapy, patients schedule as much or as little as they desire to achieve the change they want.

In an application of the patient-led approach in primary care services of the National Health Service (NHS) in Scotland (Carey, 2010), patients controlled how many and how frequently appointments were scheduled. Patients made appointments with receptionists in the same way they made appointments to see GPs. At the first session it was explained to patients that they could book

appointments as often as they wanted for as long as they wanted within the constraints of sessions available at the practice. Consistent with the good-enough-level model, patients did not access services indefinitely but attended about the same average number of sessions observed in other studies of routine practice (Carey, 2011a). Most patients attended a small number of sessions (usually between two and four). A small number of patients attended 15 or more sessions. There were very few cancelled or nonattended appointments (Carey & Mullan, 2007; Carey & Spratt, 2009). Appointment schedules varied widely; however, few patients followed a regular pattern of weekly or biweekly appointments.

As a result of most patients having no cancelled or nonattended appointments, the patient-led approach had unexpected and beneficial effects on the capacity of the service such that waiting lists were reduced at the same time as the number of patients being referred increased (see Carey & Spratt, 2009). Conversely, the far higher number of missed and cancelled appointments usually encountered in routine practice might indicate that patients are already making their own decisions about when they will attend treatment.

There is nothing in the patient-led approach that prohibits clinicians from suggesting a particular time-frame for appointment scheduling if that appears clinically warranted. But whether appointments are determined by the patient or suggested by the clinician, patients attend treatment under their own volition. We suggest it is respectful and optimistic to convey belief in patients' capacity to address their own needs in this way.

### Study Design and Goals

A patient-led approach is particularly sensible in the context of rural and remote Australia where public mental health services are scarce and patients may have to travel great distances to attend them. We studied patient-led scheduling in a psychology clinic established in the public mental health service in one remote Australian town. This article describes a practice-based study of treatment effectiveness (assessed by effect size of change on standard instruments) and efficiency (ratio of effect size to sessions attended) across the first 2 years of this clinic's operation.

### Method

#### Setting and Clinician

The psychology clinic was conducted as part of the Adult Community Team in the public mental health service in a remote Australian town of approximately 28,000 people. The public mental health service in Australia is a secondary care service. The clinic operated for two mornings per week (four appointments available in each) by one clinical psychologist with more than 10 years of experience in providing psychological treatments in routine clinical practice. Referrals to the service were received from psychiatrists and case managers.

#### Patients

Males and females who were over the age of 18 and seeking services from the public mental health service were referred to the psychology clinic on an individual basis. Over the 2-year period

(October 2010 to October 2012) of the study, a total of 92 patients (51 males) were referred to the service. Patients were included in our sample if they had been referred to the psychology clinic and an appointment had been scheduled for them at any time within the study period. Because of the patient-led nature of appointment scheduling, the last included session in this study was not necessarily a formal end of treatment.

Patient age ranged from 18 to 67 years with a mean of 38.1. As in other practice-based studies (e.g., [Paley et al., 2008](#)) inclusion criteria were minimal, and patients were not assigned a diagnosis by the psychologist prior to participating in the study. Patients presented with a wide range of diagnoses or problem formulations provided by referring clinicians. These ranged from relationship problems and anger management to chronic paranoid schizophrenia and bipolar disorder. The most common were depression and anxiety (including posttraumatic stress disorder and obsessive-compulsive disorder) with eating disorders and substance abuse problems also present. Because this was the only psychology clinic in the public mental health service in this remote town, the sample of patients was the entire population of adult patients in the public mental health service who were referred for psychological treatment during the 2-year study period.

### Therapeutic Approach

A transdiagnostic cognitive therapy called the Method of Levels (MOL; [Carey, 2006b, 2008](#); [Mansell, Carey, & Tai, 2012](#)) was used with all patients. MOL recognizes that people typically have many goals, some of which may conflict with each other, and some of which may be out of awareness. One path out of conflict is stepping up a *level* of abstraction to compare goals with each other from a broader perspective. MOL is based on [Powers's \(2005\)](#) perceptual control theory, which suggests that behavior can be understood as control of perception and hence as a perceptually guided approach to desired goals.

In MOL, each session is seen as a discrete problem solving episode in which systematic questioning is used to create an experiential analysis of the patient's distress. Change within MOL, as more broadly in perceptual control theory, involves a process of reorganization in which random changes are generated in an iterative process until conflict is resolved ([Carey, 2006b](#)).

### Measures

The Outcome Rating Scale (ORS; [Miller & Duncan, 2004](#)) is a visual analogue measure that assesses the domains of individual, social, relational, and overall functioning. It is scored from 0 to 40, with scores at or below 25 indicating clinically severe levels of psychological distress.

The Session Rating Scale (SRS; [Miller & Duncan, 2004](#)), another visual analogue scale, assesses patient's perceptions of the therapeutic alliance such as the extent to which the patient felt respected and heard, and the degree of agreement between the patient and the clinician regarding the goals of therapy. It too is scored from 0 to 40, with scores of 36 or below on the SRS indicating cause for concern about the therapeutic alliance. The ORS and the SRS are written in accessible language and were completed without difficulty by the patients.

The manual for the ORS and SRS ([Miller & Duncan, 2004](#), p.7) reported studies that demonstrate acceptable reliability and validity

statistics for the scales (e.g., Cronbach's coefficient  $\alpha = .93$ ; test-retest reliability = .66; concurrent validity coefficient = .58 for the ORS). [Campbell and Hemsley \(2009\)](#) reported a Cronbach coefficient of .90 for the ORS and .93 for the SRS, as well as moderate to strong interitem correlations for the ORS ( $r = .58-.97$ ) and strong interitem correlations for the SRS ( $r = .74-.86$ ).

The MOL Session Evaluation Form ([Carey & Tai, 2012](#)), designed to be completed by both the clinician providing MOL and an observer of the clinician's practice, consists of eight core features of MOL practice as described in key texts ([Carey, 2006b, 2008](#); [Mansell et al., 2012](#)). Examples of items include: "To what extent did the therapist question rather than advise, suggest, or teach?"; "To what extent did the therapist ask about the patient's immediate experience?"; and "To what extent did the therapist facilitate the client sustaining a focus in one or more areas?". Items are rated on a 1 to 10 scale; scores provide an indication of MOL treatment integrity of the session.

### Procedure

**Data collection.** Patients completed the ORS at the beginning of every session and the SRS at the end of every session. Monitoring patient progress at regular intervals was particularly important in this study because it was never clear how many appointments a patient would schedule (cf. [Gibbard & Hanley, 2008](#); [Okiishi, Lambert, Nielsen, & Ogles, 2003](#)).

**Treatment integrity.** After every session attended by all patients during the 2 years of the study, the clinician completed the MOL Session Evaluation Form ([Carey & Tai, 2012](#)). Additionally, an external observer with doctoral qualifications in clinical psychology and extensive experience in the training, supervision, and practice of MOL observed all of the sessions provided during one 10-week period. In that time, sessions of 11 of the 51 (22%) patients who scheduled more than one appointment were observed. Patients were asked to give their permission for the observer to be present in the clinic room during each session. Patients' SRS scores were similar whether the observer was present or absent.

The independent clinician and observer ratings were correlated ( $r = .83$ ); discrepancies of more than two rating points were discussed at the conclusion of each clinic and reconciled where appropriate. Mean total scores indicated that MOL was generally delivered to a high standard. The mean total score (maximum score = 80) was 66.3 for the clinician and 67.4 for the observer.

### Analysis: Indexes of Treatment Effectiveness and Efficiency

Treatment effectiveness was assessed using an uncontrolled (prepost) effect size, calculated as the mean change on the ORS from the first to the last administration divided by the ORS standard deviation at the first administration. Effect sizes have drawbacks ([Barkham et al., 2008](#); [Westbrook & Kirk, 2005](#)); however, they provide one way of gaining a sense of the progress patients make in therapy. In the present study, because the last session measured was not necessarily the end of treatment, the effect size may be a conservative estimate of treatment effectiveness.

As additional measures of treatment effectiveness, we calculated indexes of *reliable change* and of *reliable and clinically signifi-*

cant improvement (RCSI), following Jacobson and Truax (1991). Reliable change refers to improvement or deterioration exceeding the outcome measure's reliable change index—a change large enough to be unlikely to have occurred by chance ( $p < .05$ , based on  $t$  test logic; see Jacobson & Truax, 1991). The reliable change index for the ORS has been variously reported as 4.3, 5.0, 6.7, or 6.8 in different studies (see review by Miller & Duncan, 2004). For this study, we adopted the conservative index of 6.8. To achieve RCSI, a patient's change score must exceed the reliable change index and additionally improve from at or below the clinical cutoff of 25 (Miller & Duncan, 2004) at the first administration, to above 25 at the final administration.

Treatment efficiency was assessed using an efficiency ratio devised for this study: the ratio of effect size to mean number of sessions attended. An efficiency ratio closer to 1 would represent more efficient treatment and a number closer to 0 would represent less efficient treatment.

Additionally, following the logic of benchmarking, we compared appointment attendance, treatment effect size, and the efficiency ratio observed in our study with attendance, effect sizes, and efficiency ratios from other practice-based studies where these indexes were provided or could be calculated from the available data. We also benchmarked reliable change and RCSI statistics with other practice-based studies.

## Results

Data were analyzed using the R software environment (R Core Team, 2012). Statistical significance was assessed and confidence intervals were constructed using resampling methods due to the power and robustness of these methods. Resampling methods such as permutation tests and bootstrapping are statistical procedures that use the observed data or a data generating mechanism “to produce new hypothetical samples, the results of which can then be analyzed” (Simon, 1999, p. 2). Although these methods have been available since the 1930s, they were initially replaced by less powerful, less accurate parametric approximations (Good, 2006) because of the demanding computational nature of the resampling methods. Today, however, modern computers have eliminated the computational difficulties making resampling methods a viable and attractive resource for researchers. Thus, permutation tests were used to assess statistical significance and bootstrapping was used to calculate confidence intervals.

For the first 8 months of the 2-year period, only one clinic per week (four possible appointments up to 1 hr each) was offered. Once procedures had been established and the clinic was operating smoothly a second clinic (another four possible appointments) was introduced. Table 1 shows the appointments provided each week, the number of appointments booked including first appointments, and the number of cancelled or missed appointments.

## Patterns of Attendance

Of the 92 patients referred to the clinic during the 2-year study period, 16 did not attend any scheduled appointments, 25 attended one session, and 51 patients attended more than one session. As shown in Table 2, these groups were demographically similar, and the mean lengths of sessions were similar across groups (differences were not significant).

Patients who attended more than one session were somewhat more distressed than patients who only attended one session ( $p = .05$ ). The test statistic used was the mean difference in  $ORS_{Time 1}$  scores (mean difference = 2.7) and  $p$  values were calculated by 10,000 iterations of the permutation test. There was a nonsignificant difference ( $p = .24$ ) in the  $SRS_{Time 1}$  scores between these groups indicating similar levels of first-session therapeutic alliance.

As shown in Table 2, the 51 patients who attended more than one session averaged 3.6 sessions (range 2–11) while averaging only 1.1 missed and 0.4 cancelled appointments. None attended appointments at regularly spaced intervals. To illustrate the varied change trajectories observed when patients are not constrained by set schedules, Figure 1 shows four patients' ORS scores at each appointment and the time, in weeks, between each appointment for each patient.

Note that our one-appointment and more-than-one-appointment groups were constructed by us post hoc and may not reflect the experience of patients. For example, patients attending only one appointment within this 2-year time frame are not considered to be treatment dropouts or to have received single-session therapy.

Figure 2 illustrates the change trajectories of three patients who might have been considered treatment dropouts or treatment failures in a conventional program of treatment delivery. The top graph shows the attendance pattern of a 23-year-old man who was employed and in a long-term relationship. He presented for assistance with anger management. He attended his second appointment 44 weeks after the first appointment and then a third appointment 2 weeks after the second appointment. The middle graph is

Table 1  
Number of Appointments Available, Booked, Attended, Cancelled, and Missed Per Week During 2-Year Study Period

Appointments	October 2010–June 2011 Mean (range)	June 2011–October 2012 Mean (range)	October 2010–October 2012 Mean (range)
Available	3.9 (2–4)	6.3 (4–8)	5.6 (2–8)
Booked	2.6 (0–4)	5.4 (1.9*)	4.5 (0–9*)
Attended	1.5 (0–4)	3.5 (0–7)	2.9 (0–7)
Cancelled	0.3 (0–2)	0.4 (0–3)	0.4 (0.3)
Missed	0.4 (0–3)	1.5 (0–4)	1.2 (0–4)
First	0.7 (0–3)	1.5 (0–4)	1.4 (0–4)

\* Occasionally an extra appointment would be made available or a patient would cancel at the last moment and another patient would be booked in.



Table 2  
*Characteristics of the Patients Attending 0 Sessions, 1 Session, or More Than 1 Session*

Patient characteristic	Number of sessions attended		
	0*	1	More than 1
<i>n</i>	16	25	51
Age mean (range)	37.2 (18–59)	36.4 (20–62)	39.3 (23–67)
Gender <i>n</i>	M = 10; F = 6	M = 12; F = 13	M = 29; F = 22
In long-term relationship <i>n</i> (%)	NA	11 (44%)	26 (51%)
Employed <i>n</i> (%)	NA	14 (56%)	33 (65%)
Attended sessions mean (range)	0	1	3.6 (2–11)
Cancelled sessions mean (range)	0.1 (0–1)	0.2 (0–2)	0.4 (0–2)
Missed sessions mean (range)	1 (0–2)	0.5 (0–2)	1.1 (0–6)
Minutes per session mean (range)	0	49.2 (15–90)	49.8 (28–77)
Initial ORS mean (range)	NA	17.3 (4.4–29.4)	14.6 (2.1–38.3)
Initial SRS mean (range)	NA	32.4 (19.6–40)	33.7 (18.2–39.5)

Note. M = male; F = female; ORS = Outcome Rating Scale; SRS = Session Rating Scale.

\* In this group, an initial appointment was scheduled for patients but they did not attend.

the pattern of therapy access and change of a 39-year-old woman who was unemployed and in a long-term relationship. She was experiencing severe depression and anxiety and previously had a chronic substance addiction. As indicated by her ORS scores she initially experienced an exacerbation of her distress but improved after that. She attended her fourth appointment 10.5 weeks after her third. Note that only the first two ORS scores were within the

2-year time frame of this study; considered out of context, these would suggest a misleading impression of her progress in treatment. Similarly, the bottom graph provides the data obtained from the ORS scores of a 43-year-old woman who was employed and not in a long-term relationship, and was experiencing social anxiety and self-esteem problems. Only her first appointment occurred within the time frame of the study so, for the purposes of this

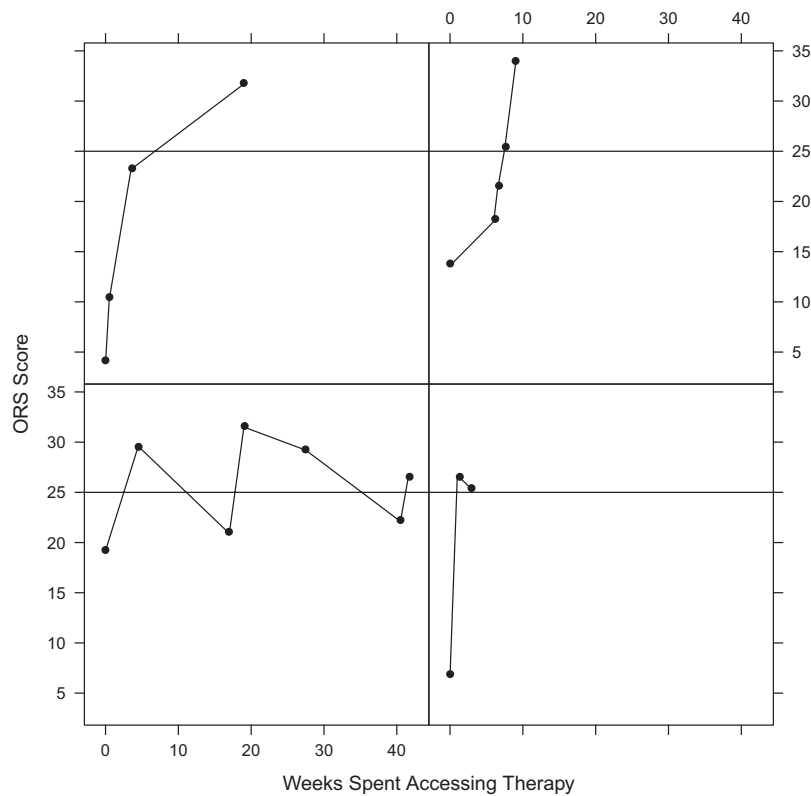
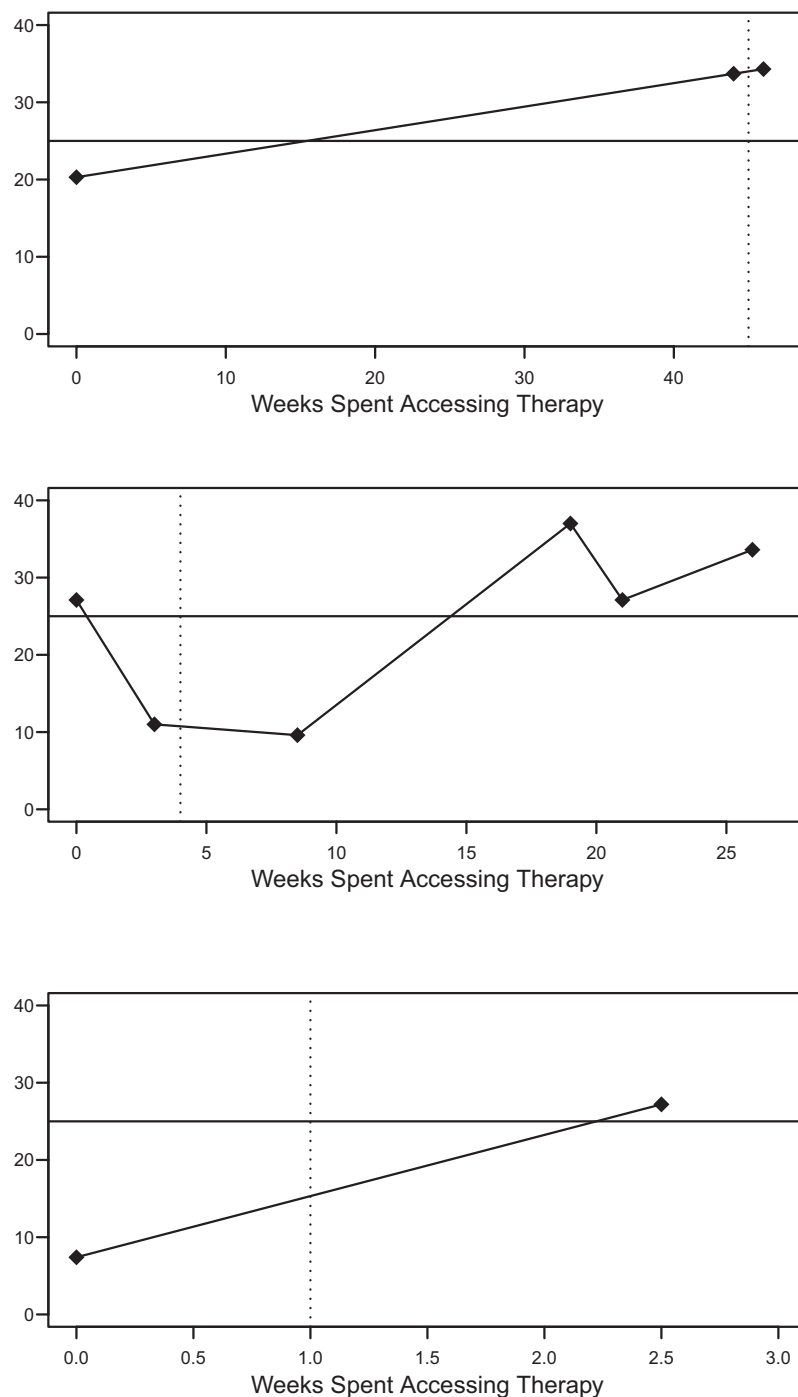


Figure 1. The change trajectories of four patients with the patient-led model of treatment delivery. The horizontal line on each of the plots is set at the ORS score of 25 which is the established cut-off for clinical distress. Scores below the line are regarded as being indicative of clinical levels of distress whereas scores above the line are outside the clinical range.



*Figure 2.* Pattern of accessing therapy by three patients who demonstrated different change trajectories over different time periods and who might have been considered treatment dropouts or treatment failures in a conventional model of treatment delivery. Note the different time frames of therapy as indicated by the scales on the x-axes. The dotted vertical line in each graph indicates when data collection finished for this particular patient for this study.

study, her data were recorded in the “one appointment” group. She scheduled a second appointment, however, almost three weeks after her first appointment and, according to her ORS scores, made RCSI.

### Effectiveness and Efficiency of the Treatment

Of the 51 patients who attended more than one session, four had initial ORS scores above the clinical cut-off of 25 (see Miller &

Duncan, 2004). Because they did not begin in the clinically distressed population, they could not achieve RCSI by definition, and we omitted them from our summaries of effectiveness and efficiency, leaving  $n = 47$ . For this group there was a mean difference of 8.96 between the first and last ORS scores (permutation test using the mean difference as the test statistic with 10,000 iterations,  $p < .0001$ ,  $n = 47$ ). The bootstrapped 95% confidence interval for this difference was 6.0 to 11.9. Table 3 shows the rates of reliable change and RCSI in this group along with rates obtained in other practice-based studies.

The effect size for patients treated in this study (change from first to last ORS score divided by  $SD$  of first ORS score) was 1.45 ( $n = 47$ ). As shown in Table 4, this effect size was similar to effect sizes obtained in other practice-based studies. Some of the previous studies investigated more than one therapy or calculated more than one effect size based on different outcome measures and these results are included separately in Table 4.

The efficiency ratio (effect size divided by 3.6, the mean number of sessions) was 0.4. Table 4 compares this result with efficiency ratios calculated for other practice-based research studies for which effect sizes and average numbers of sessions were provided or could be calculated. Effect sizes from the following practice-based studies are not shown in Table 4 because average numbers of sessions were not provided: Jorm (2011) reported an effect size of 1.31 for clinical psychologists and 1.46 for general psychologists using Australian data. Miller, Duncan, Brown, Sparks, and Claud (2003) reported an effect size of 0.7 for data obtained from a community family services agency in the United States. In addition, Cahill, Barkham, and Stiles (2010) reported an average effect size of 1.29 from 10 practice-based studies located through a systematic review of practice-based research.

Consistent with previous nonsignificant or inconsistent findings of linear change in alliance across sessions (Stiles & Goldsmith, 2010), SRS scores did not change significantly from first to last sessions. One score was missing for the  $SRS_{Time 1}$  scores ( $n = 46$ ) and two scores were missing for the  $SRS_{Time 2}$  scores ( $n = 45$ ). For this group there was a mean difference of 0.88 between the first and last SRS scores (permutation test using the mean difference as the test statistic with 10,000 iterations,  $p = .91$ ). Furthermore, there was a nonsignificant correlation between the initial SRS scores and the number of sessions attended ( $r = -0.1$ ,  $p = .52$ ,  $n = 46$ ). Replicating previous responsive regulation research (Stiles et al., 2008a;

Stiles, Barkham, Twigg, Mellor-Clark, & Cooper, 2006) we also found a nonsignificant correlation between the number of sessions attended and change on the ORS between the first and last sessions ( $r = .11$ ,  $p = .46$ ,  $n = 47$ ).

## Discussion

Treatment employing patient-led scheduling in this remote Australian town appeared to be similarly effective and more efficient than routine treatment described in previous practice-based studies (Tables 3 and 4). It yielded similar mean gains despite a lower mean number of sessions per client, as summarized by the efficiency ratio (see Table 4). And, as a further efficiency, this was accompanied by very low levels of missed and cancelled appointments. These results replicate and extend findings reported in the studies in the Scottish NHS, described earlier (Carey, 2011a).

Finding that the efficiency ratio was higher in this patient-led approach than in other practice-based studies (see Table 4) suggests that the patients may have made better use of sessions when they took the initiative for scheduling. Perhaps they scheduled sessions when they felt a greater readiness to make changes. Or perhaps they felt a greater responsibility for session success when they had taken the initiative to schedule it.

The efficiencies achieved by reducing the incidence of cancelled or missed appointments are substantial. In a previous study, a reduction in missed first appointments was reduced from 21% to 2% by switching to a patient-led system in one service (Carey & Kemp, 2007), and another service reduced its DNA rate "from 21% to 7.5% by making changes which gave patients more choice of appointment times" (Scottish Government, 2012, p. 29).

This study replicated and extended work in the NHS in Scotland, described earlier (Carey, 2011a). As in this study, a low average number of appointments were attended and very low averages of missed and cancelled appointments were recorded. Patients seemed to use the approach for good therapeutic effects and both GPs and patients regarded the approach favorably (Carey & Mullan, 2007). Our finding of very similar results in a different health system, in a different country, and in secondary care rather than in primary care lends confidence to their generality.

## Policy and Practice Implications

The great variability in patterns of attendance, illustrated in Figures 1 and 2, seems to us to call for a reconsideration of conventional thinking about how therapy fits into people's lives.

Table 3

*Numbers of Patients Showing Reliable Improvement and Clinically Significant Improvement as Well as No Change and Reliable Deterioration Benchmarked Against Other Secondary Care Studies*

Reference	<i>n</i>	Reliable improvement (%)	^Recovered (%)	No reliable change (%)	Reliable deterioration (%)
Current study	47	64	53	34	2
Barkham et al. (2001)*	224	54	39	40	6
Westbrook & Kirk (BDI; 2005)*	893	48	34	50	2
Westbrook & Kirk (BAI; 2005)*	893	50	32	47	3
Lucock et al. (2003)*	318	58 <sup>†</sup>	42	39	3

^ The percentages of patients recovered are those who showed reliable and clinically significant improvement. <sup>†</sup> Reported as 60% (18 + 42) in Cahill et al. (2010) but as 58% in Lucock et al. (2003). \* Studies cited in Cahill et al. (2010, p. 442, Table 3).



Table 4

*Average Session Numbers, Effect Sizes, and Efficiency Ratio for Various Published Studies of Evaluations of Routine Clinical Practice*

Reference	n	Therapy <sup>†</sup>	Average session	Effect size	Efficiency ratio <sup>*</sup>
Current study	47	MOL	3.6	1.45	0.40
Marriott & Kellett (2009)	25	Medium-term PCT	20.6	0.87	0.04
Persons et al. (1999)	45	CBT	34.8	1.79	0.05
Paley et al. (2008)	62	PIT using BDI <sup>‡</sup>	16.9	0.87	0.05
Paley et al. (2008)	62	PIT using CORE-OM <sup>‡</sup>	16.9	0.76	0.05
Marriott & Kellett (2009)	27	Medium-term CAT	21.1	1.23	0.06
Westbrook & Kirk (2005)	893	CBT using BAI <sup>‡</sup>	13.2	0.94	0.07
Marriott & Kellett (2009)	27	Medium-term CBT	21.9	1.72	0.08
Marriott & Kellett (2009)	38	Short-term PCT	10.4	0.87	0.08
Marriott & Kellett (2009)	38	Short-term CAT	13.4	1.04	0.08
Westbrook & Kirk (2005)	893	CBT using BDI <sup>‡</sup>	13.2	1.15	0.09
Clement (2008)	550	Eclectic	17.4	1.87	0.11
Marriott & Kellett (2009)	38	Short-term CBT	13.4	1.90	0.14
Stiles et al. (2008b)	261	PDT	8.1	1.29	0.16
Gibbard & Hanley (2008)	697	PCT	7.0	1.20	0.17
Stiles et al. (2008b)	1,045	CBT	7.3	1.38	0.19
Stiles et al. (2008b)	1,709	PCT	6.8	1.39	0.20
Stiles et al. (2008b)	1,035	CBT + 1	6.1	1.40	0.23
Stiles et al. (2008b)	530	PDT + 1	6.0	1.42	0.24
Stiles et al. (2008b)	1,033	PCT + 1	5.8	1.43	0.25
Stiles et al. (2008a)	9,703	Various	6.4	1.96	0.31

<sup>‡</sup> The BDI is the Beck Depression Inventory (Beck, Steer, & Brown, 1996), the BAI is the Beck Anxiety Inventory, and the CORE-OM is the Clinical Outcomes in Routine Evaluation-Outcome Measure (Barkham, Gilbert, Connell, Marshall, & Twigg, 2005). <sup>†</sup> Therapy: CBT = Cognitive Behaviour Therapy; PCT = Person Centred Therapy; PDT = Psychodynamic Therapy; CBT + 1 = CBT combined with one other therapy; PCT + 1 = PCT combined with one other therapy; PDT = Psychodynamic combined with one other therapy; PIT = Psychodynamic Interpersonal Therapy; CAT = Cognitive Analytic Therapy; Eclectic = "pragmatic, empirical, experimental, and functional" (Clement, 2008, p. 217); Various = "most common approaches were integrative (40.4%), person-centred (37.0%), structured/brief (31.4%), cognitive-behavioral (26.4%), supportive (16.8%), and psychodynamic (16.1%)" (Stiles, Barkham, Connell, & Mellor-Clark, 2008a, p. 299); MOL = Method of Levels. <sup>\*</sup> Efficiency ratio, devised for this study, is defined as the amount of change per session attended (effect size/average number of appointments).

Incorporating patients' agency into policy planning—taking responsive regulation seriously—could offer a new perspective on conventional problems in psychotherapy such as resistance, adherence, and patients' lack of motivation and engagement (Carey, Kelly, Mansell, & Tai, 2012) and could lead to changes in the design and delivery of mental health services.

If patients can be trusted to schedule sessions as and when they will most benefit, it may not be necessary to cap appointment numbers or otherwise limit patients' access to treatment. The cost associated with maintaining a flexible system of scheduling seems very likely to be offset by the savings in professional time associated with the reduction in missed or cancelled appointments. In some settings, perhaps appointments could be scheduled by patients online.

Some therapists may have philosophical as well as procedural concerns about an approach that promotes the self-determination of patients to the extent that patient-led scheduling does (Carey, 2010). Should patients determine the level of change they require or should therapists use their professional training and experience to decide what is required? Currently, it appears that some therapists embrace each approach. The patient-led scheduling approach affords an opportunity for therapists in the former group to implement their beliefs concerning locus of judgment regarding psychological distress and its amelioration.

## Limitations

We emphasize that our conclusions must be considered as tentative and preliminary; assessing the generality of the effects of

patient-led scheduling will require implementation in a far greater variety of settings and treatments. As in other practice-based studies, there was no control group and no inclusion or exclusion criteria. In our study, patients were seen in a single setting by a single clinician who assessed problems without formal diagnostic measures and seen by the same clinician, who used a single therapeutic approach. Many of the patients continued to see psychiatrists or case managers (or both), so we are unable to separate the effects of this therapy from other assistance that might have been provided.

Finding that patient-led scheduling yielded similar results in this remote Australian town to those observed in the earlier study in GP practices in the Scottish NHS (e.g., Carey, 2010; Carey & Mullan, 2007; Carey & Spratt, 2009) suggests some degree of generality. Extensions to different settings such as university counseling centers and private practices would provide additional tests of the generality of the apparent benefits. Further work is also required to assess the response of clinicians and administrators to this substantial change in procedure for scheduling psychotherapy.

## Conclusion

Our results suggest that, when appointment scheduling is led by patients, therapy can be as effective and more efficient than in usual practice. The patient-led approach to treatment is a respectful and optimistic approach that suggests that patients can decide for themselves when they need treatment and also when they have had enough.

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