Treatment Outcome Data for Better Access Scheme

Chris Mackey
Laura Capitanio
Jerad Erikson
Emily Hill
Megan Trickey
Tanya Herrmann-Doig
Mary Dimovski
Zora Bradonjik
Suzanna Copp
Amber Denehey
Kerry Gemmell
Cathy Faulkner
Olivia Grace
Clare Heaney
Barb Tilden
Emma Musella
Carley Amey
Liz Westphal

Chris Mackey & Associates
Specialist Psychology Services
Geelong VIC AUSTRALIA

The above current and former psychologists at Chris Mackey and Associates have all contributed to the compilation of the following outcome evaluation data which reports on treatment outcomes of clients seen through the Better Access (Medicare rebate) scheme funded by the Australian Federal Government
The following slides are based on research presentations at the 33rd National Conference of the Australian Association of Cognitive and Behavioural Therapy in Melbourne on 19th April, 2010,
the 11th International Mental Health Conference of the Australia and New Zealand Mental Health Association in Surfers’ Paradise on 18th August, 2010
the 46th Annual National Conference of the Australian Psychological Society in Canberra on 7th October, 2011 and
35th National Conference of the Australian Association of Cognitive and Behavioural Therapy on Gold Coast on 18th October, 2012

The outcome data presented may be used as a reference point by other mental health practitioners to compare the before and after scores on relevant questionnaires of the clients they have treated. Those who obtain similar results are likely offering effective and efficient treatments. The data also provide substantial objective evidence of the effectiveness of the Better Access (Medicare) scheme.
Calls for evidence of effectiveness of the Better Access scheme

- Effectiveness relates to how well treatments work in “real-world” settings such as everyday private practice settings. Little such research exists as it is time-consuming, difficult and generally not funded. But academic research on “efficacy” of treatments based on highly selected participants in highly controlled settings may not be representative and generalizable.

- There have long been calls by psychologists for more effectiveness research, including in relation to the Better Access scheme (e.g. Carey et al., Clinical Psychologist, March 2009). This has been followed by criticism of limited research demonstrating effectiveness of the scheme within the media (see following pages for examples).
Criticisms of Better Access Scheme in the Media
(The following excerpts were from The Sunday Age, 30th January, 2010)

- The Sunday Age, p.3, under heading “Mental health fund blow-out”;
  “Despite the huge investment ($1.5 billion by 2011 for the Medicare-based scheme) - three
times original estimates - the Federal Government has not released any evidence that the
consultations are improving mental health.”

- [The scheme] “discriminates by money, geography and age”. It squeezed funding for
  proven services, such as mental health nursing.
  - Ian Hickie, Director, Brain & Mind Res Inst.

- “Increased psychological consultations are welcome if they’re reducing mental illness or
  creating flourishing people, [but] we don’t know that.”
  - David Crosby, CEO of MHC of Aust
“Most experts on the government’s advisory council now believe the program is sucking money from where it is needed most - services for mentally ill young people - and shutting out men, the poor and rural dwellers.” - Page 1

The program is “a Rolls-Royce we don’t need” and is so accessible it is treating not just the so-called “worried well”, but people who are “not even worried”.

- Neil Cole, Associate Professor, Monash Medical School

Interestingly, no such calls were being made to call for evidence for the effectiveness of private psychiatry services, funded for up to 50 sessions a year at higher rebate levels than those for psychologists, despite those services being even more vulnerable to the same criticisms. We are aware of no objective evidence whatsoever for the effectiveness of private psychiatry services throughout decades of Medicare rebate funding.
The Need for Objective Evidence

Therefore, *even before the evidence was in*, there were increasingly strong assertions made by some prominent individuals within the mental health field, especially those linked with psychiatry, who claimed that the Better Access scheme was too expensive, of questionable effectiveness and targeting the wrong people.

Some of those who pre-judged the scheme, and indeed campaigned against it, purport to adopt a scientific approach. A scientific approach is meant to be based on evidence. Their lack of challenge for the greater cost, lesser accessibility and dearth of evidence supporting private psychiatry services revealed a clear bias. Nonetheless, it is important that policy decisions are based on real-world evidence.
The Need for Objective Evidence

- The official report on the Better Access scheme by Professor Jane Pirkis and colleagues, which was commissioned by the Federal Government, was released in March 2011. That report documented clear evidence for the effectiveness of psychological services offered through the scheme. The evidence from that report is summarized in an article in the September issue of the Australian and New Zealand Journal of Psychiatry. Gathered within a few years of the introduction of the scheme, it likely exceeds the sum total of existing objective evidence collected in support of the effectiveness of private psychiatry services over several decades.

- Despite the evidence being in, there appeared to be no reduction in criticisms of the scheme, especially by those linked with the field of psychiatry. Others questioned the official report findings on such grounds as potential non-representativeness of clients, limited range of measures used, absence of comparison conditions, no follow-up data, questionable reliability of diagnoses and difficulty establishing what interventions were used. The research presented here augments the official study by addressing a number of these limitations.
Features of this Research

- The research data presented here was based on psychological therapy interventions by every single psychologist at Chris Mackey and Associates.
- An attempt was made to collect data on every single client.
- A wide range of objective measures was used including measures of symptoms, positive wellbeing and client satisfaction with therapy.
- All psychologists had postgraduate qualifications in clinical psychology, counselling psychology and health psychology and were closely supervised in individual (and often group) supervision by the Principal Psychologist with over 25 years’ experience in applying CBT interventions.
- Clients were diagnosed according to DSM-IV criteria, the reliability of which was supported by individual and group supervision sessions and the use of relevant measures (at times including structured interviews).
- Objective outcome data has been collected on most clients seen which strongly supports its representativeness. Some follow up data has been collected on approximately 200 clients, but is at an early stage of analysis.
Further Evidence for Effectiveness of Psychological Treatments

The following slides report on outcome evaluation data collected at this practice using a rigorous evaluation process. They provide direct evidence of the effectiveness of psychological treatments offered through the Better Access (Medicare rebate) scheme to 1117 adult clients over a five-year period. This research has been accepted for presentation at national scientific conferences referred to earlier, commonly after a scientific peer review process. The research presented here supplements and supports findings from the official Better Access report.
Principles of Outcome Measurement

(These principles were used as guidelines for the current research)

- Define goals & objectives  (i.e. spell out what you hope will change)
- What is important to consumers?  (it needs to be relevant to clients)
- What is possible and practical?  (needs to be realistic in real-world situation)
- Choose existing relevant measures  (not just symptoms, also wellbeing)
- Use reliable, valid, brief measures
- Decide who should conduct Assessment  (the treating psychologist)
- Measure on a fixed schedule  (in this case sessions 1, 5, 10 and final)
Measures
(of symptoms as well as of positive wellbeing)

- Beck Anxiety Inventory (BAI; Beck, 1990)
- Beck Depression Inventory (BDI; Beck, 1978)
- Positive and Negative Affect Scale (PANAS; Watson et al., 1988)
  - Positive Affect Subscale (PA)
  - Negative Affect Subscale (NA)
- Satisfaction with Life Scale (SWLS; Diener et al., 1985)
- Outcome Rating Scale (ORS; Miller & Duncan, 2000) (measures wellbeing)
- Session Rating Scale (SRS; Miller et al., 2000) (measures client satisfaction)
- Global Assessment of Functioning Scale (GAF; DSM-IV)
Evaluation Process

- Give BAI, BDI, PANAS & SWLS at session 1
  - For each course of therapy
- ORS and SRS every session
- BAI, BDI, PANAS, SWLS at session 5 (or 6) & 10
- Repeat measures at final session
  - Can use recent data as final session data if 70% into therapy and representative
  - Use GAF and ORS scores if no other final data
- Can then check course of change and generalizability of results
Systemic Strategies to Enhance Reliability of Data

- Sophisticated computer program incorporates diary and outcome data
- Archive sheet in file documents questionnaire results throughout therapy
- Admin staff collect data, recall clients, post letters, request files for archiving
- Clinicians review and refine decision rules (e.g. limited exclusion criteria)
- Practice principal and doctoral student systematically check records and data
- Missing data systematically identified and requested from clinician
Better Access Client Base

(Client age & gender)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 18 yrs</td>
<td>not included in this analysis (12%)</td>
<td></td>
</tr>
<tr>
<td>18 - 29 yrs</td>
<td>31%</td>
<td></td>
</tr>
<tr>
<td>30 - 39 yrs</td>
<td>28%</td>
<td>Male 36%</td>
</tr>
<tr>
<td>40-49 yrs</td>
<td>20%</td>
<td>Female 64%</td>
</tr>
<tr>
<td>50-69 yrs</td>
<td>19%</td>
<td></td>
</tr>
<tr>
<td>&gt;70 years</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>

Note that approx. 40% of all clients seen have been aged under 30 years and over one third are male, in contrast to past claims that the scheme mainly supports middle aged women.
### Better Access Client Base

(Client severity & no. of sessions seen)

<table>
<thead>
<tr>
<th>Severity</th>
<th>%</th>
<th>Sessions</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slight</td>
<td>9%</td>
<td>1-2 Sess’ s</td>
<td>16%</td>
</tr>
<tr>
<td>Mild</td>
<td>30%</td>
<td>3-6 Sess’ s</td>
<td>38%</td>
</tr>
<tr>
<td>Moderate</td>
<td>35%</td>
<td>7-10 Sess’ s</td>
<td>22%</td>
</tr>
<tr>
<td>Severe</td>
<td>26%</td>
<td>&gt;10 Sess’ s</td>
<td>23%</td>
</tr>
</tbody>
</table>

Severity ratings based on BAI and BDI
(slight < 10, mild ≥ 10, moderate ≥ 20, severe ≥ 30)
Clients Included in Evaluation

1942 rebatable client treatments from Jan 2007 to December 2011

Excluded 266 treatments where clients also seen as a couple, or in a group, or seen as a parent, or with a brain injury, intellectual disability, language problems, who were unwilling to attend, or were seen in hospital elsewhere, who refused to complete questionnaires (n=14) or who were still in ongoing therapy (n=42)

\[ n = 1676 \] completed treatments of adults; 1117 included in this analysis

- **Have currently collected 1117 pre-post BAI & BDI scores (67%)**
  - Clients seen on average for 8.1 sessions
  - 656 pre and post PANAS and SWLS scores (59%)
  - 1099 pre and post GAF scores (98%)
  - 1006 ORS scores (98% from Jan 2009)

101 clients were seen for more than one course of therapy, often a year or so apart
The following slides report our combined outcome evaluation data in a number of ways including clients’ average scores on each measure before and after treatment (for BAI and BDI, scores ≥10 reflect mild symptoms, ≥20 reflect moderate symptoms, and ≥30 reflect severe symptoms). T-tests indicate the likelihood of results being obtained by chance. Effect size statistics indicate how the average client at end of treatment has fared compared with those at start. Statistics reporting change for individuals indicate the proportion of clients who obtained statistically significant (which generally meant clinically significant) reductions in symptoms or improvement in wellbeing.
### Average Scores Pre- & Post-Treatment & T-Test Results

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
<th>significance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BAI</strong></td>
<td>17.7 (11.1)</td>
<td>8.8 (8.9)****</td>
<td>(n = 1117)</td>
</tr>
<tr>
<td><strong>BDI</strong></td>
<td>19.1 (9.8)</td>
<td>9.0 (8.9)****</td>
<td>(n = 1117)</td>
</tr>
<tr>
<td><strong>PA</strong></td>
<td>22.7 (8.3)</td>
<td>31.1 (9.3)****</td>
<td>(n = 665)</td>
</tr>
<tr>
<td><strong>NA</strong></td>
<td>26.9 (8.3)</td>
<td>17.9 (8.0)****</td>
<td>(n = 665)</td>
</tr>
<tr>
<td><strong>SWLS</strong></td>
<td>17.5 (7.2)</td>
<td>22.4 (7.5)****</td>
<td>(n = 665)</td>
</tr>
<tr>
<td><strong>GAF</strong></td>
<td>56.8 (6.4)</td>
<td>68.1 (9.4)****</td>
<td>(n = 1099)</td>
</tr>
</tbody>
</table>

* **** p<.0001 (Less than 1 in 10,000 likelihood of result being obtained by chance)

(i.e., mean scores for anxiety and depression dropped from mild-moderate level to normal range - this degree of change was beyond chance.)

(i.e., average client at end of treatment was better off than 46% of normal population on positive affect).

SWLS score range for normal population is 20 to 25

Functioning improved to level where treatment not generally required.
## Effect Size Statistics

<table>
<thead>
<tr>
<th>Measure</th>
<th>ES</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAI</td>
<td>0.83</td>
<td>79%</td>
</tr>
<tr>
<td>BDI</td>
<td>1.02</td>
<td>84%</td>
</tr>
<tr>
<td>PA</td>
<td>-0.88</td>
<td>80%</td>
</tr>
<tr>
<td>NA</td>
<td>1.01</td>
<td>84%</td>
</tr>
<tr>
<td>SWLS</td>
<td>-0.77</td>
<td>78%</td>
</tr>
<tr>
<td>GAF</td>
<td>-1.33</td>
<td>90%</td>
</tr>
<tr>
<td>ORS</td>
<td>-1.11</td>
<td>86%</td>
</tr>
</tbody>
</table>

(i.e., average client at end of treatment was better off than 79% off than those at start of treatment on this measure)
### Change For Individuals
(% of clients whose scores significantly improved v. worsened on measures)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Improved</th>
<th>Worsened</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAI</td>
<td>41.4%</td>
<td>1.8%</td>
<td>(reported at least a 9-point difference)</td>
</tr>
<tr>
<td>BDI</td>
<td>54.2%</td>
<td>1.4%</td>
<td>(reported at least an 8-point difference)</td>
</tr>
<tr>
<td>PA</td>
<td>48.7%</td>
<td>3.3%</td>
<td>(reported at least an 8-point difference)</td>
</tr>
<tr>
<td>NA</td>
<td>50.3%</td>
<td>1.0%</td>
<td>(reported at least a 9-point difference)</td>
</tr>
<tr>
<td>SWLS</td>
<td>35.6%</td>
<td>1.9%</td>
<td>(reported at least a 7-point difference)</td>
</tr>
<tr>
<td>GAF</td>
<td>52.1%</td>
<td>&lt;1%</td>
<td>(reported at least an 9-point difference)</td>
</tr>
<tr>
<td>ORS</td>
<td>67.3%</td>
<td>2.1%</td>
<td>(reported at least a 6-point difference)</td>
</tr>
</tbody>
</table>
Course of Recovery
(n = 754)

By session 5 (or 6) average level of anxiety and depression had reduced from the mild-moderate range to just within the mild clinical range. By end of treatment average levels of distress for those seen for at least 5 sessions had dropped to non-clinical (normal) range. Therefore change happens quickly and efficiently.

Average 10.0 sessions (at average cost to taxpayer of approx $1000)
Course of Improvement

(*n = 603*)

Average 9.8 sessions!
ORS scores below line represent low wellbeing - within clinical range. Within 5 sessions average client was just entering normal range of wellbeing (above line). This supports other findings showing improvement to normal levels of wellbeing.

High SRS scores (generally above 36) reflect good therapeutic alliance. Average SRS scores here showed improvement characteristic of positive therapy process and high client satisfaction at completion.

Average 9.8 sessions.
Those clients seen for more than ten sessions showed increased benefit from the extra sessions. It was only after more than ten sessions that their symptoms had reduced to the non-clinical (normal) range. This finding indicates that some clients require more than ten sessions for a fuller recovery.

Average 15.6 sessions for clients seen for over 10 sessions
The following slide documents outcomes for clients with Major Depressive Disorder (MDD) offered psychological interventions for depression through the Better Access (Medicare rebate) scheme.

• 238 clients were on medication & seen for an average of 9.8 sessions
• 178 clients were not on medication & seen for an average of 9.7 sessions (for these clients average cost to taxpayer was approximately $100 per session with an average client co-payment of approximately $90).
Clients treated without medication (9.7 sessions) have shown equivalent rates of recovery to those treated with therapy and medication combined (9.8 sessions).

An advantage of no medication, apart from ongoing costs of medication and no side effects, is that clients who have recovered without medication generally have lower relapse rates.

We still believe that many clients might benefit from medication (e.g. if depression is chronic, severe, and not responding quickly to therapy). These findings nonetheless establish that many depressed clients recover well with therapy alone, and medication is probably frequently overused.
The previous slide therefore demonstrates that many clients with Major Depressive Disorder benefit from psychological interventions which are not only efficient, but also commonly just as effective whether or not the client was using prescribed medication. The average BDI score at post-treatment for clients treated both with and without medication was just within the mild range, reflecting a relatively good recovery. The treatment also appears cost-effective (average cost to taxpayer of around $1000 with a lesser co-payment from client). Treatment without medication includes many benefits including cost-savings, no side effects, lower relapse rates and less pessimistic treatment models (many clients with depression are unnecessarily told they will need medication for the rest of their lives).

- Clients were seen on average for under ten sessions. However, a number of clients required more than ten sessions (see next slides)…
How many sessions for depression?

The next slide shows the course of recovery of 101 clients with Major Depressive Disorder (MDD) in response to psychological treatment of more than ten sessions in order to indicate the impact of those extra sessions. This issue is important given the current proposal to limit Medicare rebate funding to no more than ten sessions through the Better Access scheme.

The graph indicates that of those depressed clients who were treated for more than ten sessions (approx. 25% of those with MDD), their symptoms reduced to near-normal levels only after the extra sessions beyond the initial ten. These clients typically had more chronic or severe depressive conditions. The psychological treatments for these clients were clearly effective overall, regardless of whether they had also used prescribed medication. However, the extent of recovery was partly attributable to the extended number of sessions.
Course of recovery for MDD (on BDI)

Average 18.2 v. 19.6 sessions
Conclusions (1)

- This scheme is working well for many clients whose anxiety and depressive symptoms reduce on average from the mild-moderate to the normal (non-clinical) range.

- The average client at end of treatment reports a normal level of subjective wellbeing (and therefore appears to be flourishing).

- Therapy appears cost effective, on average costing approx. $1500 with cost of approx. $800 per course of treatment to taxpayer.
Conclusions (2)

We have demonstrated that:

- Psychological treatments can be very effective
- For a large number of diverse people
- With significant mental health problems
- In reducing symptoms *and* enhancing wellbeing
- In relatively few sessions
- Often without medication
- In accessible, everyday clinical settings
Conclusions (3)

The scheme has proven to be clinically and cost-effective even for many clients with severe or complex conditions. However, to effectively treat such conditions as Major Depressive Disorder, the evidence shows that more than ten sessions are required for at least some clients to recover to near normal levels. This suggests that continued successful treatment outcomes for such clients, following the reduction in rebatable sessions from 16 to 10 per calendar year, will depend in large part on the calendar month in which they present.
Conclusions (4)

The evidence is now in. Recent criticisms of the scheme are not supported by the evidence. We now call on critics of the scheme to similarly call for evidence on the treatment effectiveness of private psychiatry services. It seems a failure of public policy that those clients requiring more than ten sessions may be directed to seek (commonly non-accessible) sessions with private psychiatrists for up to fifty higher-cost sessions per year despite less evidence of treatment effectiveness than now exists for psychological therapies.
Feel free to email Chris Mackey at cm@chrismackey.com.au to discuss these findings or any related issue of interest. We are especially interested to hear from others about findings from similar research related to outcome evaluation.