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# Treatment Outcome Benchmarking Data for Private Practice Settings


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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

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**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**

**and the 11th International Mental Health Conference of the Australia and New Zealand Mental Health Association in Surfers Paradise on 18th August, 2010**

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 provides substantial objective evidence of the effectiveness of the Better Access (Medicare) scheme.

# Do Psychological Therapies Work Under Clinically Representative Conditions?

- Question of effectiveness vs. efficacy

  Effectiveness relates to how well treatments work in real-world settings such as everyday private practice settings; efficacy relates to how well treatment interventions are found to work with carefully selected client groups under carefully controlled conditions, e.g. in randomised control trials conducted in academic research settings. There are questions as to how representative and generalizable the latter findings may be to everyday clinical settings.

- A key question: Are efficacious treatments transportable?

- Shadish et al. (2000) in Psych Bulletin raised this issue 10 years ago

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# Clinical Psychologist
# Vol 13, No. 1, March, 2009

**(Relevant articles from the journal of the APS College of Clinical Psychologists)**

- What does $AUD27,650,523.80 worth of evidence look like?

  - Carey, Rickwood & Baker

  From within the psychology profession, questions have been asked of the effectiveness of psychological treatments offered through the Better Access (Medicare rebate) scheme in particular, highlighting the lack of relevant data - the following slides present such outcome data.

- Outcome Rating Scale and Session Rating Scale in psychological practice: Clinical utility of ultra-brief measures

  - Campbell & Hemsley

  (there are brief practical measures for assessing treatment response and client satisfaction)

# Media References

**(There have also been increasing calls from the media for evidence of the effectiveness of the Better Access scheme which was introduced in November 2006)**

- Sunday Age newspaper on 30th Jan, 2010 stated under heading Mental health fund blow-out on page 3;

  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.

- More detailed quotes from the Sunday Age article are reported on the next slide.
- A similar issue was raised on 774 radio, Melbourne on 26th Feb, 2010.
- There are therefore calls for evidence of the effectiveness of this scheme from both professional and mainstream media circles.

# Sunday Age, 30th Jan, 2010

- 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

- [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.

# Sunday Age, 20th June, 2010

## (by mid 2010 challenges to the scheme have become more strident)

- 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

# The Need For Objective Evidence

- Therefore, *even before the evidence is in*, there have been increasingly strong assertions made by some prominent individuals within the mental health field that the Better Access scheme is too expensive, of questionable effectiveness and targeting the wrong people. Some of those who have pre-judged the scheme, and indeed have campaigned against it, purport to adopt a scientific approach. A scientific approach is meant to be based on evidence.
- During the recent federal election campaign, mental health services were raised as an important issue. However, little reference was made to the Better Access scheme despite two million Australians voting with their feet to access it so far. This scheme has already become the most widely used scheme to address the mental health of Australians, of whom one in five are estimated to suffer from some mental health problem(s).
- It therefore seems timely that we can now present objective data relevant to the effectiveness of this scheme which is reaching many of those people.

# 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 525 adult clients. This research has been accepted for presentation at national scientific conferences referred to earlier.

# 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
- Use reliable, valid, brief measures
- Decide who should conduct Assessment
- 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 for Reliable 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 & no. of sessions seen)

- Under 18 yrs 15% (approx)
- 18 - 24 yrs 12%
- 25 - 29 yrs 10%
- 30-49 yrs 43%
- >50 yrs 20%

- 1-2 Sess s 18%
- 3-6 Sess s 46%
- 7-12 Sess s 26%
- >13 Sess s 10%

# Clients Included in Evaluation

1298 Adult rebate client treatments from Jan 2007 to May 2010 offered via Medicare rebate scheme

Excluded 180 who were also seen as a couple, or in a group, or seen as a parent, or with a brain injury or intellectual disability, or who were unwilling to attend, or were seen in hospital elsewhere)

- *n* = 1118 treatments of adults (for whom 34% men and 66% women).
- Have currently collected 525 BAI & BDI scores (47%) for clients seen on average for 7.5 sessions.
- Have currently collected 739 pre and post GAF scores (66%), 309 ORS scores (from Dec 2008).
- Have currently collected 233 pre and post PANAS and SWLS scores (21%).
- 45 clients were seen for more than one course of therapy, often a year or so apart.
- Proportion of outcome data collected for BAI & BDI: 2007 (33%), 2008 (56%), 2009 (45%).
- Were unable to collect data on BAI and BDI for at least 266 clients (24%).
- It is unclear as yet whether have data for a further 250 clients (22%). It takes time to process files.
- Percentage of outcome data collected is increasing as our systems keep improving.

# Outcome Data

- 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.

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# Average Scores Pre- & Post-Treatment & T-Test Results

| | Pre | Post | |
|---|---|---|---|
| | *M* (*SD*) | *M* (*SD*) | |
| BAI (*n* = 525) | 18.8 (11.4) | 9.3 (8.7)**** | (i.e., mean scores for anxiety and depression dropped from mild-moderate level to normal range - this degree of change was beyond chance.) |
| BDI (*n* = 525) | 20.1 (9.4) | 9.3 (8.7)**** | |
| PA (*n* = 233) | 21.9 (8.0) 13%ile | 31.2 (9.5)**** 47%ile | (i.e., average client at end of treatment was better off than 47% of normal population on positive affect). |
| NA (*n* = 233) | 26.7 (7.9) 93%ile | 17.5 (8.2)**** 71%ile | |
| SWLS (*n* = 233) | 17.3 (7.2) | 22.8 (7.9)**** | SWLS score range for normal population is 20 to 25 |
| GAF (*n* = 546) | 57.6 (6.8) | 68.2 (10.1)**** | Functioning improved to level where treatment not generally required. |

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

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# Effect Size Statistics

| | *ES* | % | |
|---|---|---|---|
| BAI (*n* = 525) | 0.98 | 83% | (i.e., average client at end of treatment was better off than 85% off than those at start of treatment on this measure) |
| BDI (*n* = 525) | 1.19 | 88% | |
| PA (*n* = 233) | -1.00 | 84% | |
| NA (*n* = 233) | 1.12 | 86% | |
| SWLS (*n* = 172) | -0.90 | 81% | |
| GAF (*n* = 739) | -1.27 | 89% | |
| ORS (n = 309) | -1.21 | 88% | |

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# Change For Individuals

## (% of clients whose scores significantly increased or decreased)

| | | | |
|---|---|---|---|
| BAI (*n* = 525) | 48.8% ↓ | 1.9% ↑ | (reported at least a 9-point difference) |
| BDI (*n* = 525) | 61.7% ↓ | 1.9% ↑ | (reported at least a 7-point difference) |
| PA (*n* = 233) | 46.4% ↑ | <1% ↓ | (reported at least an 8-point difference) |
| NA (*n* = 233) | 45.5% ↓ | <1% ↑ | (reported at least a 9-point difference) |
| SWLS (*n* = 233) | 29.2% ↑ | <1% ↓ | (reported at least a 7-point difference) |
| GAF (*n* = 739) | 44.6% ↑ | <1% ↓ | (reported at least a 10-point difference) |
| ORS (*n* = 309) | 68.9% ↑ | 3.6% ↓ | (reported at least a 6-point difference) |

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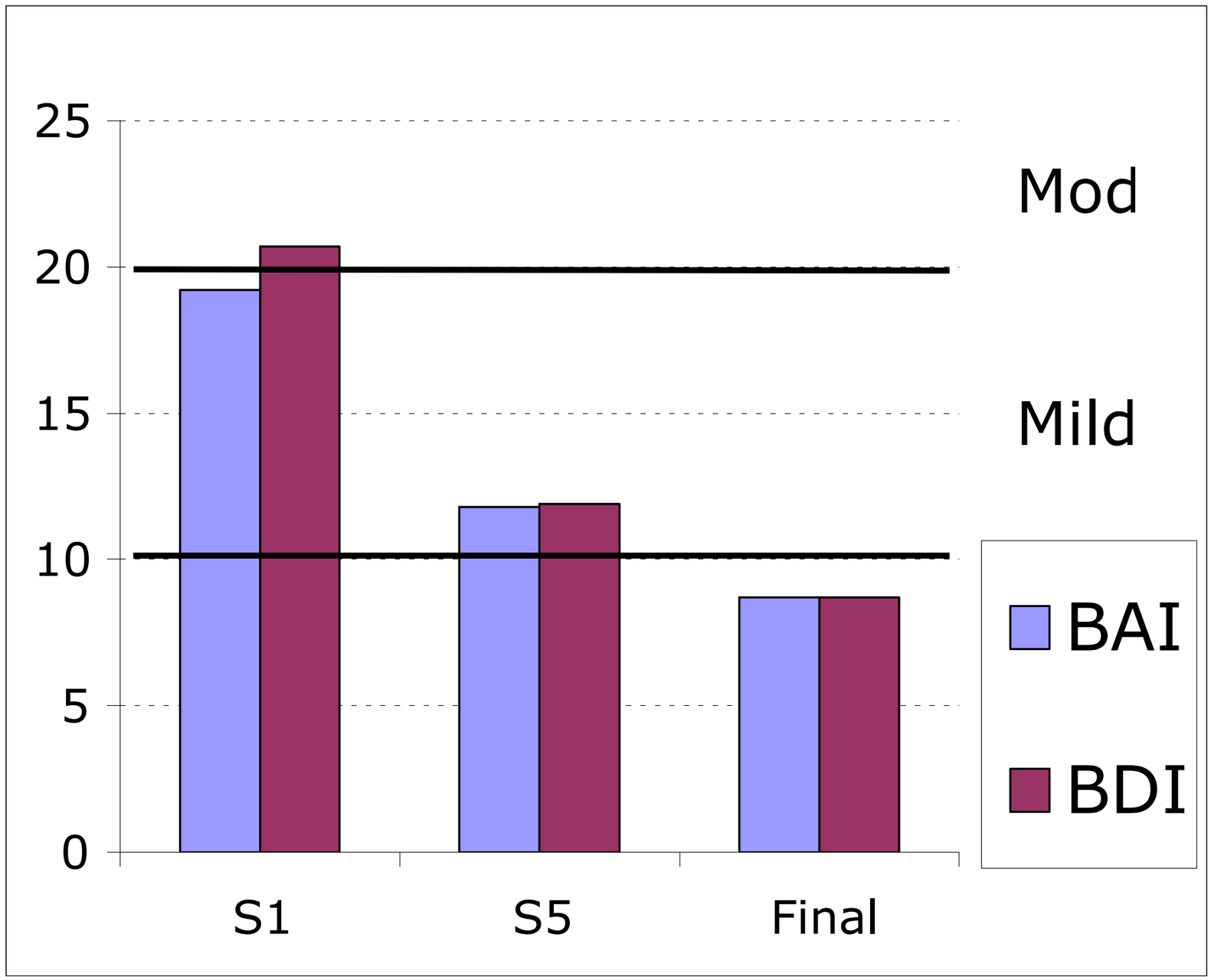
# Course of Recovery

**(*n* = 378)**




(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 had dropped to non-clinical (normal) range. Therefore change happens quickly and efficiently.

Average 8.7 sessions (at average cost to taxpayer of under $1000)

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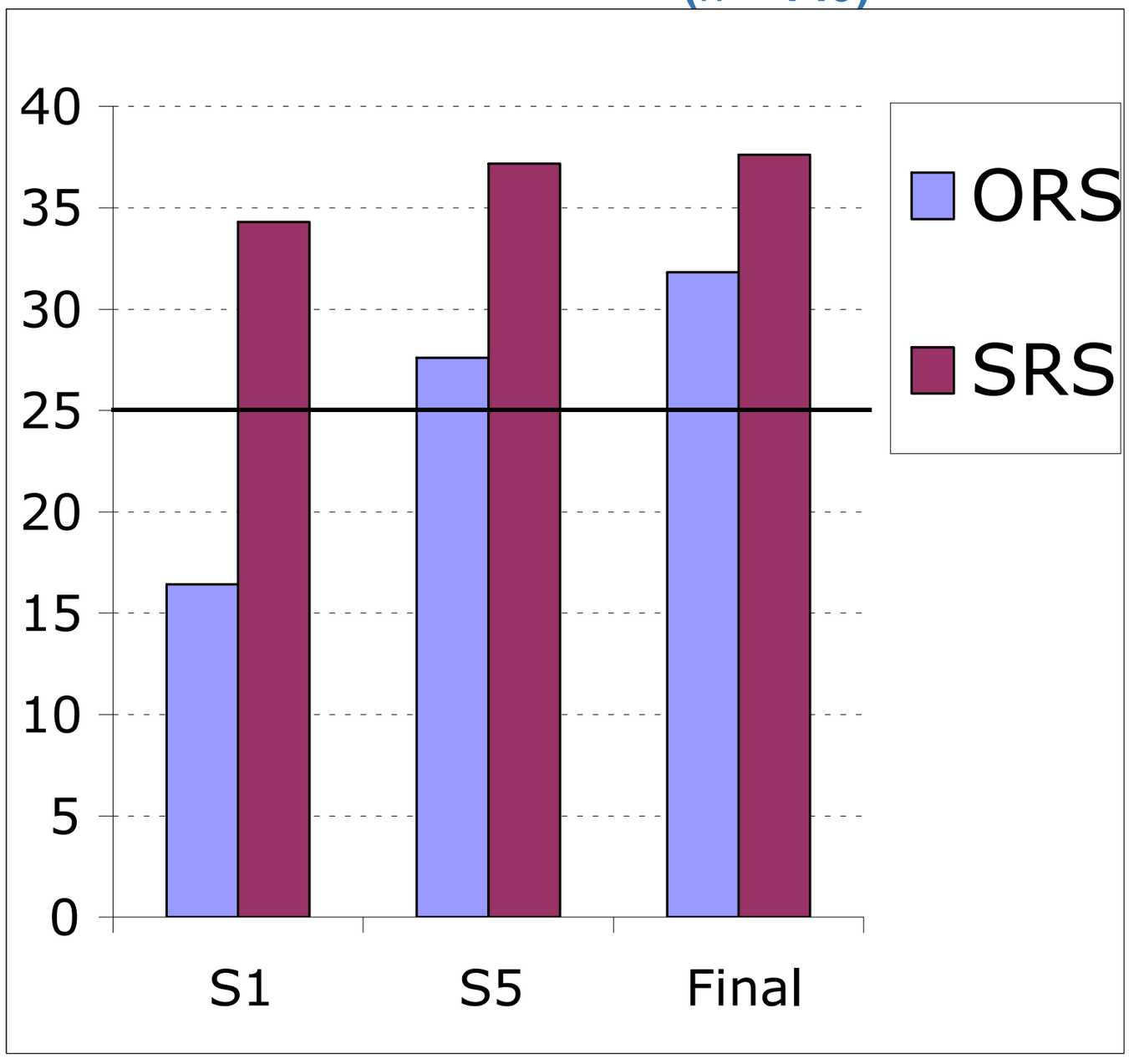
# Course of Improvement

**(*n* = 149)**




(ORS scores below line represent low wellbeing - within clinical range. Within 5 (or 6) sessions average client was just entering normal range of wellbeing (above line).
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 8.2 sessions

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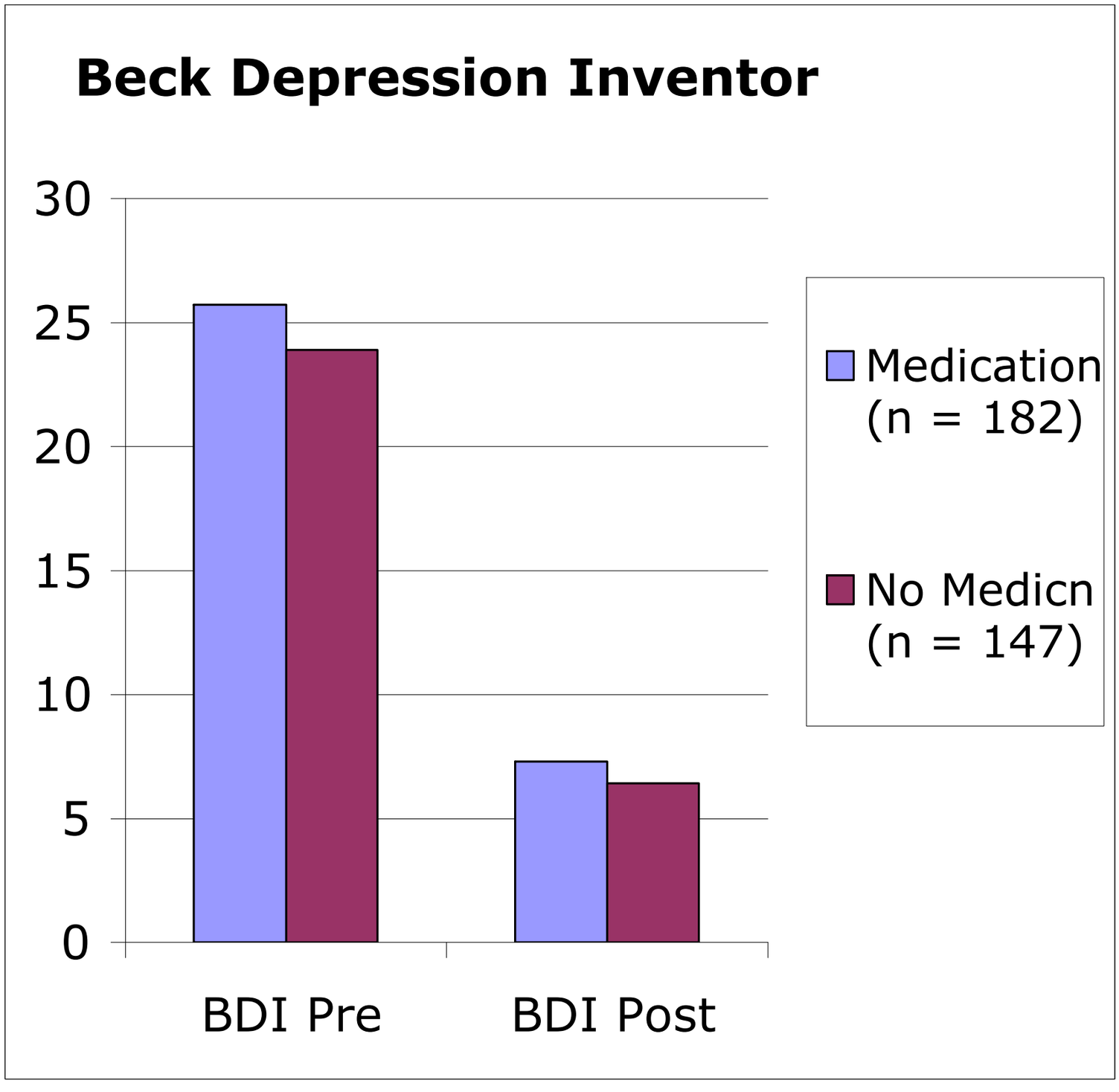
# Treatment Outcome for Depressive Conditions

- The following slide documents outcomes for clients with depressive conditions (including Major Depressive Disorder, Depressive Disorder NOS and Adjustment Disorder with Depressed Mood) offered psychological interventions for depression through the Better Access (Medicare rebate) scheme.

  182 clients were on medication & seen for an average of 7.5 sessions

  147 clients were not on medication & seen for an average of 6.2 sessions

  (for these clients average cost to taxpayer was approximately $100 per session with an average client co-payment of approximately $80).




Our clients treated without medication have shown equivalent rates of recovery to those treated with therapy and medication combined.

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

We still believe that many clients benefit from medication (e.g. if depression is chronic, severe, and not responding quickly to therapy. This data nonetheless establishes that many depressed clients recover very well with good therapy alone.

# Treatment Outcome for Depressive Conditions (cont.)

- The previous slide therefore demonstrates that many clients with depressive conditions benefit from psychological interventions which are not only efficient (clients were seen on average for just under ten sessions), 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 in the non-clinical range, reflecting a relatively full recovery. The treatment also appears cost-effective (average cost to taxpayer of under $800) with a lesser co-payment from client. Treatment without medication may include other long-term savings as a number of clients with depression are unnecessarily told they will need to be on medication for the rest of their lives. Medication may also have unwanted side effects.

# 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.
- 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. $1400 with cost of approx. $750 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)

**Recent criticisms of the scheme are not supported by the evidence. The scheme has only been operating since November, 2006. Treating large numbers of clients and compiling generalizable data, such as reported here, takes considerable time, especially as such efforts are entirely self-funded and are conducted in the practitioners  spare time. The data presented here can be used as a benchmark against which to gauge the clinical and cost effectiveness of other mental health services.**

# Website

- www.chrismackey.com.au

- See research page

- 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. We shall likely next update our findings in early 2011.