



**Evaluating the Access to Allied  
Psychological Services Component of the  
Better Outcomes in Mental Health Care  
Program**

*Eighth Interim Evaluation Report*

**Consumer outcomes:  
The impact of different models of  
psychological service provision**

**Belinda Morley, Jane Pirkis, Kristy Sanderson,  
Philip Burgess, Fay Kohn, Lucio Naccarella, Grant Blashki**

**June 2006**

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# Executive summary

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## Background

One hundred and eight Access to Allied Psychological Services projects have been funded under the Better Outcomes in Mental Health Care program since July 2001. The current report is the eighth in a series evaluating various aspects of the projects. It examines the extent to which the projects are achieving positive outcomes, and explores the association between different models of service delivery and varying levels of consumer outcomes.

## Method

Data from a purpose-designed minimum dataset and a survey of models of service delivery were analysed to answer two evaluation questions:

- What is the level of consumer outcomes within and across projects?
- Does the level of consumer outcomes vary depending on the model of service delivery?

## Results

The projects are achieving positive effects, mostly of large or medium magnitude. This suggests that the projects are effective in improving the mental health of consumers who are receiving psychological services.

Projects do not differ markedly in terms of the consumer outcomes they are achieving, despite their differences in models of service delivery. Only one variable emerged as significant: projects implementing direct referral systems are tending to achieve greater levels of consumer outcomes. In addition, there were non-significant trends toward employment of allied health professionals being predictive of greater consumer outcomes and delivery of services from allied health professionals' own rooms being predictive of lesser consumer outcomes.

## Conclusions

Overwhelmingly, the Access to Allied Psychological Services projects are having a positive impact for consumers in terms of their level of functioning, severity of symptoms and/or quality of life. Preliminary indications suggest that a service delivery model incorporating the use of a direct referral system may be associated with superior outcomes, but further work is needed to confirm this finding, particularly since earlier work has shown that contextual factors are important in the selection of different models by projects. The findings are discussed in the light of the recent announcement that psychologists' services will be listed on the Medicare Benefits Schedule (MBS) from November 2006, as part of the new Council of Australian Government mental health reforms.

# Chapter 1: Background

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The Better Outcomes in Mental Health Care program began in July 2001, in response to the high burden of mental illness in Australia. As its name suggests, the Better Outcomes in Mental Health Care program strives to achieve better outcomes for Australians with mental health problems (particularly depression and anxiety), by improving access to high quality mental health care. The program has sought to achieve this by offering GPs training, systemic and professional support, and financial incentives via a number of interlocking components (described in more detail in Appendix 1).

One of these is the Access to Allied Psychological Services component. Through this component, GPs can refer consumers to allied health professionals<sup>a</sup> (predominantly psychologists) for 6+ sessions of evidence-based care (i.e., focused psychological strategies), via 108 projects being conducted by Divisions of General Practice. These projects have been funded in four funding rounds: 15 from June 2002 (Round 1 pilot projects); 14 from January 2003 (Round 1 supplementary projects); 41 from July 2003 (Round 2 projects); 32 from July 2004 (Round 3 projects); and six from July 2005 (Round 4 projects). A full list of projects is provided in Appendix 2.

Since just after the projects began, the University of Melbourne's Program Evaluation Unit (located within the School of Population Health) has produced seven evaluation reports, drawing on data from the projects' local evaluation reports, a purpose-designed minimum dataset, a forum and several surveys. Taken together, these reports indicate that the projects have improved access to high quality psychological care for people whose access might otherwise have been restricted by barriers such as cost.<sup>1-7</sup>

The ultimate arbiter of success, however, is whether the Access to Allied Psychological Services projects are having a positive impact in terms of consumer outcomes (e.g., level of functioning, severity of symptoms and/or quality of life). Each project is contractually required to put in place a system whereby an outcome measure is administered when a consumer is assessed, and re-administered at review, but the choice of outcome measure used, the monitoring of administration and whether data are systematically collected and reported on are left to the discretion of the Division(s) responsible for each project. As a result, over 20 different outcome measures are being used across the projects.<sup>8</sup>

For this reason, outcome measures fields were not originally included on the minimum dataset, and were only added in mid-2005. This has limited the extent to which the evaluation work has been able to consider whether the Access to Allied Psychological Services are achieving positive consumer outcomes. Some very preliminary analyses reported in the most recent evaluation report<sup>7</sup> indicated that, in the main, consumer outcomes were positive, both for urban projects and for rural projects.<sup>7</sup> The volume of data was limited, however, and no attempt was made to combine data from different outcome measures.

The current report extends the evaluation work to date, by taking advantage of the fact that increasingly greater numbers of projects are now entering outcomes data into the minimum dataset and by using a common metric (namely an effect size) to quantify outcomes assessed by different measures. Specifically, the report examines the extent to which the projects are achieving positive consumer outcomes, and explores the association between different models of service delivery and varying levels of consumer outcomes.

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<sup>a</sup> Allied health professionals have been defined to include psychologists, social workers, mental health nurses, occupational therapists and Aboriginal and Torres Strait Islander health workers. In practice, the vast majority are psychologists.

# Chapter 2: Method

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## Evaluation questions

The current report addresses the following evaluation questions:

- What is the level of consumer outcomes within and across projects?
- Does the level of consumer outcomes vary depending on the model of service delivery?

## Examining the level of consumer outcomes within and across projects

### *Data sources*

To address the first evaluation question, the report drew on outcomes data from the previously-mentioned minimum dataset. The minimum dataset is a web-based national database which standardises the basic information collected by Divisions implementing Access to Allied Psychological Services projects. The minimum dataset captures de-identified, descriptive consumer-level socio-demographic, clinical and outcome information and session-level treatment information. Projects were included in the analysis if they had entered pre- and post-treatment scores on a given outcome measure for at least five consumers. At the time of downloading the data (mid-May 2006), 29 projects (27%) had entered sufficient outcomes data into the minimum dataset to be included in the analysis: nine Round 1 projects (31%); 15 Round 2 projects (37%); and five Round 3 projects (16%). Round 4 projects were excluded from the analysis on the grounds that they had had less implementation time than projects from the other funding rounds.

### *Data analysis: Calculating effect sizes*

A single-group pre-post measurement design across multiple projects was used in order to calculate effect sizes. This approach was chosen to cater for the naturalistic nature of the study, and the range of outcome measures being used within and across projects.

Effect sizes ( $d$ ) were chosen as the key metric as they present outcome in a standardised form to allow combination and comparison across multiple measures and studies, or in this case, projects. For repeated measures, Cohen's  $d$  provides a reasonably accurate effect size estimate.<sup>9</sup> Cohen's  $d$  was calculated as the difference between pre- and post-treatment scores divided by the pooled pre- and post- standard deviations.<sup>10</sup> As effect sizes provide a slight overestimate of the true population effect, an adjustment was applied to remove this bias<sup>10</sup> (p20, Equation 8 using adjustment provided by Equation 11). Variance around  $d$  was calculated using an equation appropriate for repeated measures studies with very small sample sizes<sup>10</sup> (p21, Equation 9 using adjustment provided by Equation 11).

The goal of the analysis was to produce one effect size ( $d$ ) per project across all available measures, and one aggregate  $d$  across all projects. The analysis employed a random effects model,<sup>b</sup> and was conducted in the following steps:

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<sup>b</sup> A random effects model assumes the variability between effect sizes is due to sampling error plus variability in the population (i.e., that projects are measuring different, but related, effects) and provides the average treatment effect. A random effects model was used in the present study to cater for the presence of heterogeneity. To calculate a random effect, a weight incorporating the standard error adjusted for heterogeneity was applied to each individual project effect size.

1. *An effect size was calculated for each outcome measure, for each project. This was restricted to consumers with both pre- and post-treatment values on any given measure.  $d$  was calculated for each measure using pre- and post-treatment means and standard deviations. In the case of the DASS sub-scales, one  $d$  was obtained from correlated subscales by averaging.<sup>13</sup>*
2. *A combined effect size was calculated within projects. (a) Where there was one measure per consumer per project (e.g., K-10 scores only), the single  $d$  calculated for that measure was used. (b) In cases where there was more than one measure per consumer (e.g., K-10 and HoNOS scores for the same consumer), the measures were averaged. This was done on the grounds that the measures were correlated, all measures were of interest and projects had medium to small sample sizes.<sup>12, 13</sup> (c) In a single case where different measures were provided for different consumers (e.g., K-10 scores for five consumers and HoNOS scores for six), the standard meta-analysis formula described below was used, on the grounds that there was no overlap and these scores were analogous to independent estimates from different studies.*
3. *Effect sizes were combined across projects. A single weighted average  $d$  was obtained using the standard meta-analysis formula for independent estimates, using the weighted inverse variance method for random effects.*

Cohen's 'rule of thumb' was used for interpreting the resultant standardised effect sizes (small effect  $d=0.20$ , medium effect  $d=0.50$ , large effect  $d=0.80$ ).<sup>12</sup> It should be noted, however, that  $d$  is based on single-group paired pre- and post-treatment scores in the current analysis, and pre-post effect sizes from single groups will generally be larger than post-treatment differences between independent groups.

## **Examining whether the level of consumer outcomes varies depending on the model of service delivery**

### ***Data sources***

To address the second evaluation question, the above outcomes data from the minimum dataset were combined with data from a project-specific survey administered in 2005 and designed to elicit information on the models of service delivery being employed by the projects. The survey achieved a 95% response rate, and profiled the projects in terms of their means of retaining allied health professionals, their location of allied health professionals, and their referral mechanisms. The survey methodology and findings have been reported in detail elsewhere.<sup>5, 14</sup> For the 29 projects contributing data to the analysis, effect sizes were added to the survey data file.

### ***Data analysis: Conducting linear regression analysis***

The association between models of service delivery and consumer outcomes was investigated using linear regression analysis. The objective was to determine which, if any, models of service delivery were predictive of higher levels of consumer outcomes. The dependent variable, consumer outcome effect size, was continuous.

# Chapter 3: What is the level of consumer outcomes within and across projects?

## Availability of outcomes data

Pre- and post-treatment scores were available from the 29 projects for a total of 2,027 consumers.

These outcome scores were available from 12 different measures, namely the Kessler 10 (K-10), the Beck Anxiety Inventory (BAI), the Beck Depression Inventory (BDI), the Hospital Anxiety and Depression Scale (HADS), the Depression Anxiety Stress Scales (DASS), the Health of the Nation Outcome Scales (HoNOS), the General Well Being Index (GWBI), the State Trait Anxiety Inventory (STAI), the Behaviour and Symptom Identification Scale (BASIS-32), Self-Rating Depression Scale (SDS), and the General Health Questionnaire (GHQ-28). It should be noted that an increase in score from pre- to post-treatment represents an improvement on all of these measures except the GWBI, where a decrease represents an improvement.

The numbers of projects using each outcome measure is shown in Table 1, as is the number of consumers for whom each measure was used. Note that the totals exceed 29 and 2,007, respectively, because some projects used more than one outcome measure for the same consumer.

**Table 1: Consumer outcome measures used by the Access to Allied Psychological Services projects**

Outcome measure	Projects (n=29)		Consumers (n=2,027)	
	Frequency	Percent	Frequency	Percent
K-10	18	62.1	1,412	69.7
BAI	4	13.8	62	3.1
BDI	4	13.8	113	5.6
HADS	3	10.3	52	2.6
DASS-21 – Depression, Anxiety, Stress	3	10.3	60	3.0
DASS-42 – Depression, Anxiety, Stress	3	10.3	121	6.0
HoNOS	2	6.9	244	12.0
GWBI	2	6.9	87	4.3
STAI	1	3.4	8	0.4
BASIS-32	1	3.4	90	4.4
SDS	1	3.4	6	0.3
GHQ-28	1	3.4	31	1.5

N.B. Multiple responses permitted

## Mean pre- and post-treatment effect sizes

The mean pre- and post-treatment effect size, weighted for sample size, for consumers across projects is 1.05 (95% CI = 0.92-1.18). This indicates that, at worst, the effect size is 0.92. Based on Cohen's interpretation of effect size, this indicates a large positive effect ( $d > 0.80$ ).<sup>12</sup>

Table 2 shows the effect sizes for the 29 (de-identified) projects. The point estimates of effect size are all positive, indicating that all projects are achieving improved consumer outcomes. Shading indicates those projects with effect sizes that are bounded by positive 95% confidence intervals (i.e., positive worst- and best-case scenarios). Twenty-two projects (76%) demonstrate positive 95% confidence intervals. Ten (34%) show large positive effects at worst, eight (28%) show medium positive effects at worst, and four (14%) show small positive effects at worst. This interpretation is conservative, because, as noted, the point estimates are all positive and the projects with confidence intervals bounded by negative lower limits tend to be those with small sample sizes.

**Table 2: Mean pre- and post-treatment effect sizes and 95 % confidence intervals by projects (n=29)**

Project	Effect size ( <i>d</i> )	95% CI	
		Lower	Upper
1	1.00	0.76	1.24
2	0.81	0.42	1.21
3	0.14	-0.32	0.59
4	0.76	0.61	0.91
5	0.81	0.27	1.35
6	0.95	0.61	1.29
7	0.75	-0.81	2.31
8	1.44	0.72	2.16
9	1.13	0.26	2.00
10	0.55	-0.29	1.38
11	1.14	0.32	1.97
12	0.48	-0.24	1.20
13	1.69	1.21	2.17
14	1.30	0.65	1.95
15	1.86	1.60	2.13
16	1.44	0.49	2.39
17	1.20	1.05	1.34
18	1.30	0.82	1.78
19	1.26	1.01	1.51
20	0.88	0.60	1.17
21	1.88	1.18	2.59
22	1.36	-0.36	3.07
23	1.20	1.00	1.40
24	1.09	0.84	1.33
25	0.39	-0.50	1.27
26	0.92	0.63	1.21
27	1.17	0.85	1.50
28	1.31	1.07	1.54
29	0.55	0.14	0.96
<b>Overall</b>	1.05	0.92	1.18

# Chapter 4: Does the level of consumer outcomes vary depending on the model of service delivery?

## Models of service delivery utilised by projects for which outcomes data were available

Table 3 shows the models of service delivery being adopted by the 29 projects in terms of their means of retaining allied health professionals, where their allied health professionals are located, and how referrals are made. It should be noted that within each of these dimensions, projects often use multiple models, so the totals commonly exceed 100%.

The data show that there is considerable variability in terms of the models of service delivery that the 29 projects are employing. At least one fifth of all projects are employing each of the different models, although some are more popular than others.

**Table 3: Dimensions on which models of service delivery differ in the projects for which outcomes data were available (n=29)**

<b>Means of retaining allied health professionals</b>	<b>Contractual arrangements</b>	Allied health professionals are retained under some sort of contract or memorandum of understanding. In most cases, contracts are with individual providers, but some Divisions have elected to enter into contracts with agencies.	24 (83%)
	<b>Direct employment</b>	Allied health professionals are directly employed by the Division.	7 (24%)
<b>Location of allied health professionals</b>	<b>GPs' rooms</b>	Allied health professionals provide services to the projects in rooms at the GPs' practices.	18 (62%)
	<b>Own rooms</b>	Allied health professionals provide services at their own premises.	20 (69%)
	<b>Other location</b>	Allied health professionals provide services at a third location.	11 (38%)
<b>Referral mechanisms</b>	<b>Voucher system</b>	This involves a system whereby the Division distributes vouchers to participating GPs who, in turn, give them to consumers. Consumers then use the vouchers to visit nominated allied health professionals, and the allied health professional redeems the vouchers for payment from the Division.	6 (21%)
	<b>Brokerage system</b>	This involves an agency (either the Division or a contracted third party) acting as a broker. GPs refer to this agency, which then allocates the referral to a specific allied health professional, sometimes using prioritisation or matching criteria.	6 (21%)
	<b>Register system</b>	This involves a system whereby a register that profiles eligible allied health professionals is provided to participating GPs, who can then make their own decisions about referral.	11 (38%)
	<b>Direct referral</b>	This involves a system whereby the GP refers the consumer directly to the allied health professional. Often this takes place in the context of the allied health professional being co-located with the GP. However, there are exceptions, where the allied health professional is located elsewhere.	14 (48%)

N.B. Multiple responses permitted.

## The association between models of service delivery and levels of consumer outcomes

Table 4 shows the standardised regression coefficients ( $\beta$ ), adjusted  $R^2$ , F-tests and p values for each of the predictors.

The results suggest that the projects do not differ markedly in terms of the consumer outcomes they are achieving, despite their differences in models of service delivery. This makes sense in the light of the findings in the previous chapter, which suggested that there is little variability in terms of consumer outcomes – the majority of projects are achieving positive consumer outcomes of significant magnitude. Having said this, projects that are using a direct referral model have significantly greater effect sizes, indicating that they are achieving better levels of consumer outcomes than their peers. In addition, there are non-significant trends toward employment of allied health professionals being predictive of greater consumer outcomes and delivery of services from allied health professionals' own rooms being predictive of lesser consumer outcomes.

**Table 4: Prediction of consumer outcomes**

Variables		$\beta$	Adj. $R^2$	F	p
<b>Means of retaining allied health professionals</b>	<b>Contractual arrangements</b>	-.15	-.01	.60	.445
	<b>Direct employment</b>	.33	.08	3.32	.080†
<b>Location of allied health professionals</b>	<b>GPs' rooms</b>	.02	-.04	.01	.920
	<b>Own rooms</b>	-.33	.08	3.30	.080†
	<b>Other location</b>	.23	.02	1.45	.238
<b>Referral mechanisms</b>	<b>Voucher system</b>	-.05	-.04	.06	.803
	<b>Brokerage system</b>	-.20	.01	1.14	.296
	<b>Register system</b>	-.10	-.03	.29	.596
	<b>Direct referral</b>	.40	.13	5.26	.030*

N.B. † <.10, \* <.05

# Chapter 5: Discussion and conclusions

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## Summary of findings

The current report quantified consumer outcomes achieved through the Access to Allied Psychological Services projects. It found that the projects are achieving positive effects, mostly of large or medium magnitude. This suggests that the projects are effective in improving the mental health of consumers who are receiving psychological services.

The report also examined the association between different models of service delivery and consumer outcomes, in order to determine whether particular models were predictive of greater or lesser levels of outcome. It found that the projects do not differ markedly in terms of the consumer outcomes they are achieving, despite their differences in models of service delivery. Only one variable emerged as significant: projects implementing direct referral systems are tending to achieve greater levels of consumer outcomes. In addition, there were non-significant trends toward employment of allied health professionals being predictive of greater consumer outcomes and delivery of services from allied health professionals' own rooms being predictive of lesser consumer outcomes.

## Some caveats

Some caution should be exercised in interpreting the above findings, because the analyses suffered from several limitations. Firstly, outcomes data were only available for 29 projects (27%), raising the question of the extent to which the findings can be generalised. Having said this, exploratory analyses (reported in Appendix 3) suggest that, in the main, these projects do not differ substantially from their counterparts for which no outcomes data were available. They are largely similar in terms of their models of service delivery, their socio-demographic and clinical consumer profiles and their treatment characteristics.

Secondly, outcomes data were only available for 2,027 consumers (5% of all consumers on the minimum dataset at the time of downloading). This is partly related to the relatively small proportion of projects contributing outcomes data to the minimum dataset, and partly related to the fact that outcomes data fields have only been available on the minimum dataset for about a year. As time goes by, and outcomes data for more consumers become available, it will be important to repeat the analyses reported here to confirm the current findings. It should be noted, however, that the number of consumers for whom outcomes data are available will always fall short of the total number of consumers who have had contact with the projects, because the majority of projects are not in a position to enter outcomes data retrospectively, and because a minority of projects do not have access to the relevant outcomes data because it is not made available to the Division(s).<sup>8</sup>

Thirdly, the analyses were complicated by the fact that different projects are using different outcome measures. Indeed, in some cases individual projects are using different measures for different consumers, and in one case multiple measures are being used for the same consumer within the same project. The methodologies employed here were designed to deal with these scenarios as rigorously as possible, but ideally the process of outcomes data collection would be streamlined to ensure projects are using a smaller number of valid and reliable measures. The Kessler 10 (K-10), the Depression Anxiety Stress Scales (DASS), and the Health of the Nation Outcome Scales (HoNOS) are the most commonly used measures across projects.<sup>8</sup>

## Interpreting the findings

These caveats aside, the findings appear to be extremely encouraging. The fact that the Access to Allied Psychological Services projects are achieving positive consumer outcomes is significant, and suggests that by increasing access to high quality mental health care they are playing a role in improving the mental health care of Australians who might otherwise not have had access to such care.

The finding that the direct referral model seems to be associated with particularly positive outcomes is worth examining in more detail, particularly in the context of the observed trends for employment of allied health professionals to be predictive of greater consumer outcomes and delivery of services from allied health professionals' own rooms to be predictive of lesser consumer outcomes. Previous work suggests that these findings may be linked, in the sense that elements of the different models often occur in tandem.<sup>5, 14</sup> Allied health professionals who receive direct referrals most commonly do so in the context of their being co-located with GPs, and this often occurs under a direct employment model. By contrast, allied health professionals who operate from their own rooms are more likely to be retained under contract, and are more likely to receive referrals via systems other than direct referral.

If direct referral and some of the other service delivery configurations that are commonly associated with it are genuinely predictive of better outcomes, consideration should be given to whether this approach should be singled out and encouraged. Such consideration is timely, given the recent announcement that psychologists' services will be listed on the Medicare Benefits Schedule (MBS) from November 2006, as part of the new Council of Australian Government mental health reforms. The precise MBS arrangements for psychologists are yet to be announced, but it is likely that they will involve psychologists providing services from their own practices following a general referral from a GP, rather than being co-located with GPs and receiving direct referrals. There is certainly an argument for the continuation of the Access to Allied Psychological Services projects alongside these new arrangements, and the two initiatives should be complementary, rather than duplicative. The new arrangements may create incentives for the Access to Allied Psychological Services projects to utilise psychologists (and other allied health professionals) who receive referrals from the GPs with whom they are co-located, and for psychologists who operate from their own rooms to largely do so via the new MBS arrangements.

Having said this, further work is clearly needed to inform decisions of this kind. In particular, it is necessary to conduct ongoing analyses to ensure that the findings are not an artefact of methodological issues. As noted above, the current analyses suffered from a paucity of data, and it may be that the observed results are not replicated once more data become available. In addition, there may be issues to do with inter-rater reliability, which also require exploration. Earlier work suggests that in many projects, outcome measures are administered by the GP at assessment but by the allied health professional at review, raising questions of inter-rater reliability.<sup>8</sup> Where the allied health professional is co-located with the GP, it may be more likely that he or she administers the outcome measure at both assessment and review, thereby obviating data quality issues associated with poor inter-rater reliability. It may be, therefore, that the tendency for larger consumer outcome effect sizes to be observed in the context of the direct referral model and smaller effect sizes to be observed when allied health professionals are providing services from their own rooms may be a by-product of improved data quality.

## Future directions

As noted, further evaluation efforts are needed to determine whether the positive consumer outcomes observed for the 29 projects involved in the current analysis can be

generalised more broadly, and to determine whether the predictor(s) of positive outcomes remain robust as more data become available.

In addition, consideration should be given to the efficiency of different models of service delivery. The current analyses represent the first comprehensive look at the effectiveness of these models, but models that are effective may not necessarily be efficient. For this reason, future work should combine costing data with outcomes data, in order to provide a cost-outcomes description of the different models.

## **Conclusions**

The findings of the current evaluation exercise shed some light on the effectiveness of the Access to Allied Psychological Services projects in improving the mental health of consumers. Overwhelmingly, the projects are having a positive impact for consumers in terms of their level of functioning, severity of symptoms and/or quality of life. Preliminary indications suggest that a service delivery model incorporating the use of a direct referral system may be associated with superior outcomes, but further work is needed to confirm this finding, particularly since earlier work has shown that contextual factors are important in the selection of different models by projects.

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# **Appendix 1: Components of the Better Outcomes in Mental Health Care initiative**

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## **Component 1: Education and training for GPs**

Through this component, GPs can participate in Familiarisation Training which introduces them to the Better Outcomes in Mental Health Care program (2 hours), then Level 1 Training which equips them to perform the 3-step mental health process (6 hours), described below and then Level 2 Training which provides them with the skills necessary to undertake focused psychological strategies (20 hours), also described below.

## **Component 2: The 3 Step Mental Health Process**

This component provides a framework for GPs to manage mental health problems, and includes an assessment (Step 1), preparation of a mental health plan (Step 2) and a review (Step 3). GPs who have completed Level 1 Training can access a Service Incentive Payment from Medicare Australia (the body responsible for administering Medicare) for providing the 3-step process.

## **Component 3: Focused Psychological Strategies**

This component promotes evidence-based focused psychological strategies, namely psycho-education, cognitive behavioural therapy and interpersonal therapy. These strategies are normally delivered by GPs in planned sessions, each lasting a minimum of 30 minutes. GPs who have completed Level 2 Training can bill Medicare Australia against specific Medicare item numbers which have been created to recompense them for their time in delivering focused psychological strategies.

## **Component 4: Access to Allied Psychological Services**

Through this component, GPs who have completed Level 1 Training are able to refer consumers to allied health professionals for the same focused psychological strategies described above. The allied health professionals are contracted to or employed by Divisions of General Practice through Access to Allied Psychological Services projects.

## **Component 5: Access to Psychiatrist Support**

This component enables psychiatrists to be reimbursed for participating in case conferences with GPs and others, and provides access to patient management advice to GPs from psychiatrists through the GP Psych Support service.

## Appendix 2: Access to Allied Psychological Services projects

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ROUND	DIVISION(S)	STATE	RURAL/URBAN
1 (Pilot)	NSW Central West	NSW	Rural
1 (Pilot)	NSW Outback	NSW	Rural
1 (Pilot)	Top End	NT	Rural
1 (Pilot)	Logan Area - QLD	QLD	Urban
1 (Pilot)	South East Alliance (formerly Bayside Brisbane)	QLD	Urban
1 (Pilot)	Sunshine Coast	QLD	Rural
1 (Pilot)	Toowoomba and District	QLD	Rural
1 (Pilot)	Adelaide Northern	SA	Urban
1 (Pilot)	Bendigo & District Div	VIC	Rural
1 (Pilot)	Dandenong Div	VIC	Urban
1 (Pilot)	East Gippsland Div	VIC	Rural
1 (Pilot)	Knox - VIC	VIC	Urban
1 (Pilot)	North West Melbourne	VIC	Urban
1 (Pilot)	Fremantle Regional Div	WA	Urban
1 (Pilot)	Perth & Hills WA	WA	Urban
1 (Supplementary)	ACT	ACT	Urban
1 (Supplementary)	Central Coast NSW	NSW	Urban
1 (Supplementary)	Hastings Macleay NSW	NSW	Rural
1 (Supplementary)	Mid North Coast NSW	NSW	Rural
1 (Supplementary)	Riverina	NSW	Rural
1 (Supplementary)	North & West Queensland	QLD	Rural
1 (Supplementary)	Southern Division of Adelaide	SA	Urban
1 (Supplementary)	Ballarat & District	VIC	Urban
1 (Supplementary)	Central Highlands - VIC	VIC	Urban
1 (Supplementary)	Geelong Division & Otway Division	VIC	Urban
1 (Supplementary)	Mornington Peninsula	VIC	Urban
1 (Supplementary)	North East Victoria	VIC	Rural
1 (Supplementary)	GP Down South (formerly known as Peel South West)	WA	Rural
1 (Supplementary)	Greater Bunbury WA	WA	Rural
2	Blue Mountains	NSW	Urban
2	Canterbury	NSW	Urban
2	Dubbo / Plains	NSW	Rural
2	Fairfield	NSW	Urban
2	Illawarra	NSW	Urban
2	Murrumbidgee	NSW	Rural
2	Nepean Division & Hawkesbury Division	NSW	Urban
2	New England	NSW	Rural
2	North West Slopes	NSW	Rural
2	Southern Highlands	NSW	Rural
2	Sutherland	NSW	Urban
2	Brisbane South	QLD	Urban
2	Capricornia	QLD	Rural
2	Central Queensland Rural	QLD	Rural
2	Far North Queensland	QLD	Rural
2	Gold Coast & Tweed Valley	QLD	Urban
2	Ipswich and West Moreton	QLD	Urban
2	Mackay	QLD	Rural
2	Townsville	QLD	Rural
2	Adelaide Central and Eastern	SA	Urban
2	Adelaide Hills	SA	Rural
2	Adelaide North East	SA	Urban
2	Adelaide Western	SA	Urban
2	Limestone Coast	SA	Rural

<b>ROUND</b>	<b>DIVISION(S)</b>	<b>STATE</b>	<b>RURAL/URBAN</b>
2	Murray Mallee	SA	Rural
2	North West Tasmania	TAS	Rural
2	Northern Tasmania - GP North	TAS	Rural
2	Southern Tasmania	TAS	Urban
2	Central Bayside - VIC	VIC	Urban
2	Melbourne	VIC	Urban
2	Monash (Moorabbin)	VIC	Urban
2	Murray Plains	VIC	Rural
2	North East Valley - VIC	VIC	Urban
2	Southcity GP Services (Inner SE Melbourne)	VIC	Urban
2	Western Melbourne	VIC	Urban
2	Westgate	VIC	Urban
2	Whitehorse - VIC	VIC	Urban
2	Canning - WA	WA	Urban
2	Great Southern	WA	Rural
2	Osborne	WA	Urban
2	Perth Central Coast (trading as GP Coastal)	WA	Urban
3	Barrier	NSW	Rural
3	Barwon	NSW	Rural
3	Central Sydney	NSW	Urban
3	Eastern Sydney	NSW	Urban
3	Hornsby Ku-ring-gai Ryde	NSW	Urban
3	Hunter Rural	NSW	Rural
3	Hunter Urban	NSW	Urban
3	Macarthur	NSW	Urban
3	Northern Rivers	NSW	Rural
3	Northern Sydney	NSW	Urban
3	Shoalhaven	NSW	Rural
3	South East NSW	NSW	Rural
3	St George	NSW	Urban
3	Brisbane North	QLD	Urban
3	Southern Queensland Rural	QLD	Rural
3	Wide Bay	QLD	Urban
3	Barossa	SA	Rural
3	Eyre Peninsula	SA	Rural
3	Flinders and Far North	SA	Rural
3	Mid North Rural SA	SA	Rural
3	Riverland	SA	Rural
3	Yorke Peninsula	SA	Rural
3	Border	VIC	Rural
3	Central West Victoria	VIC	Rural
3	Eastern Ranges GP Association	VIC	Urban
3	Goulburn Valley	VIC	Urban
3	Mallee	VIC	Rural
3	Northern (VIC)	VIC	Urban
3	Central Wheatbelt	WA	Rural
3	Eastern Goldfields	WA	Rural
3	Mid West	WA	Rural
3	Rockingham Kwinana	WA	Urban
4	Bankstown Division of General Practice	NSW	Urban
4	Hawkesbury Division of General Practice (fundholder for former Western Sydney Division of General Practice)	NSW	Urban
4	Liverpool Division of General Practice	NSW	Urban
4	Central Australia	NT	Rural
4	Cairns Division of General Practice	QLD	Rural
4	Redcliffe Bribie Caboolture	QLD	Urban

## Appendix 3: Exploratory analyses of profiles of Access to Allied Psychological Services projects, with and without outcomes data

**Table 5: Service delivery models being implemented by Round 1, 2 and 3 Access to Allied Psychological Services projects, by availability of outcomes data**

		Outcome	Non-outcome	Total
<b>Means of retaining allied health professionals</b>	<b>Contractual arrangements</b>	24 (83%)	52 (76%)	76
	<b>Direct employment</b>	7 (24%)	20 (29%)	27
<b>Location of allied health professionals</b>	<b>GPs' rooms</b>	18 (62%)	43 (63%)	61
	<b>Own rooms</b>	20 (69%)	41 (60%)	61
	<b>Other location</b>	11 (38%)	31 (46%)	42
<b>Referral mechanisms</b>	<b>Voucher system</b>	6 (21%)	20 (29%)	26
	<b>Brokerage system</b>	6 (21%)	17 (25%)	23
	<b>Register system</b>	11 (38%)	13 (19%)	24
	<b>Direct referral</b>	14 (48%)	35 (51%)	49
<b>Total</b>		<b>29</b>	<b>68</b>	<b>97</b>

N.B. Multiple responses permitted.

**Table 6: Socio-demographic characteristics of consumers accessing care through Round 1, 2 and 3 Access to Allied Psychological Services projects, by availability of outcomes data**

	Outcome		Non-Outcome	
	Frequency	Percent	Frequency	Percent
<b>Sex</b>				
Female	1,474	76.0	29,059	73.0
Male	467	24.0	10,902	27.0
<b>Language</b>				
English	1,850	99.2	35,057	97.0
Other language	13	0.7	671	1.8
Unknown	2	0.1	428	1.2
<b>Aboriginality</b>				
Yes	25	1.3	636	1.7
No	1,653	88.0	33,188	88.4
Unknown	200	10.6	3,716	9.9
<b>Income level</b>				
Low income earner	1,238	66.0	23,245	61.3
Not low income earner	459	24.5	8,909	23.5
Unknown	178	9.5	5,768	15.2
<b>Highest level of education</b>				
Primary or below	80	4.6	1,969	6.4
Secondary	1,168	67.0	20,437	66.7
Tertiary	494	28.4	8,245	26.9

**Table 7: Clinical characteristics of consumers accessing care through Round 1, 2 and 3 Access to Allied Psychological Services projects, by availability of outcomes data**

	Outcome		Non-Outcome	
	Frequency	Percent	Frequency	Percent
<b>Diagnosis</b>				
F1 Alcohol and drug use disorders	85	4.9	2,376	7.0
F2 Psychotic disorders	31	1.8	592	1.7
F3 Depression	1,286	75.3	25,629	75.6
F4 Anxiety disorders	1,076	62.5	19,666	58.0
F5 Unexplained somatic disorders	61	3.5	997	2.9
<b>Current psychotropic medication</b>				
Benzodiazepines and/or anxiolytics	174	17.0	2,901	15.1
Antidepressants	914	89.3	17,046	88.6
Phenothiazines and major tranquilisers	68	6.6	913	4.7
Mood stabilisers	48	4.7	1084	5.6
<b>Psychiatric service history</b>				
Yes	786	42.7	14,118	38.4
No	861	46.7	17,281	47.0
Unknown	195	10.6	5,332	14.5
<b>Focused psychological strategy</b>				
Diagnostic assessment	587	33.2	13,207	40.2
Psycho-education	589	34.4	13,526	41.2
CBT - Behavioural interventions	1,110	64.9	18,277	55.6
CBT - Cognitive interventions	1,266	74.0	22,892	69.7
CBT - Relaxation strategies	866	50.6	15,077	45.9
CBT - Skills training	619	36.2	10,806	32.9
Interpersonal therapy	359	21.0	8,642	26.3

N.B. Multiple responses permitted for Diagnosis, Current psychotropic medication, and Focused psychological strategy.

**Table 8: Characteristics of treatment sessions provided through Round 1, 2 and 3 Access to Allied Psychological Services projects, by availability of outcomes data**

	Outcome		Non-Outcome	
	Frequency	Percent	Frequency	Percent
<b>Session duration</b>				
0-30 mins	125	1.1	4,439	2.9
31-45 mins	872	8.0	10,553	6.9
46-60 mins	8,622	78.6	119,473	77.9
>60 mins	1,346	12.3	18,869	12.3
<b>Session format</b>				
Individual	10,824	99.0	152,415	98.0
Group	109	1.0	3,110	2.0
<b>Session content</b>				
Diagnostic assessment	1,411	14.0	27,564	20.8
Psycho-education	2,638	26.1	41,461	31.3
CBT - Behavioural interventions	4,528	44.8	59,246	44.8
CBT - Cognitive interventions	6,285	62.1	79,755	60.3
CBT - Relaxation strategies	2,358	23.3	33,686	25.5
CBT - Skills training	2,075	20.5	31,132	23.5
Interpersonal therapy	2,472	24.4	35,219	26.6
<b>Session costs</b>				
No co-payment	8,904	83.0	97,935	73.5
\$1-\$5	153	1.5	6,122	4.5
\$6-\$10	242	2.3	14,987	11.2
\$11-\$15	18	0.2	1,340	1.0
\$16-\$20	1,331	12.4	8,242	6.2
\$21-\$25	11	0.1	2,725	2.0
\$26-\$30	13	0.1	1,124	0.8
\$31-\$40	10	0.1	404	0.3
\$41-\$50	0	0.0	149	0.1
\$51-\$60	0	0.0	92	0.1
\$61+	46	0.4	60	0.0

N.B. Multiple responses permitted for Session content.