



**Evaluating the Access to Allied Psychological Services
(ATAPS) component of the Better Outcomes in Mental
Health Care (BOiMHC) program**

Sixteenth Interim Evaluation Report

**Clinical improvement after treatment provided
through the ATAPS projects:
Do some patients fare better than others?**

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Executive summary

Background

Australia's Better Outcomes in Mental Health Care (BOiMHC) program enables GPs to refer patients with common mental disorders to allied health professionals for time-limited treatment, through its Access to Allied Psychological Services (ATAPS) projects.

The University of Melbourne's Centre for Health Policy, Programs and Economics has been evaluating the ATAPS projects since not long after their inception in 2001. This sixteenth interim evaluation report considers whether the ATAPS projects are achieving positive outcomes for patients and, if so, whether particular patient-related and treatment-related variables are predictive of these outcomes.

Method

Divisions of General Practice (Divisions), which run the ATAPS projects, are required to enter de-identified data into a purpose-designed minimum dataset, including data on patients' socio-demographic and clinical characteristics, the sessions of care they receive, and their clinical outcomes. Data were extracted from the minimum dataset from January 2006 to June 2010, and the difference between mean pre- and post-treatment scores on the range of outcome measures being used by Divisions was examined. A linear regression analysis was then conducted which used scores on the most commonly-used outcome measure as the outcome of interest.

Results

Pre- and post-treatment outcome data were available for 16,700 patients from nine different outcome measures. Across all measures, the mean difference was statistically significant and indicative of clinical improvement. The most commonly-used measure was the Kessler-10 (K-10), and pre- and post-treatment K-10 data were available for 7,747 patients. After adjusting for clustering by Division, outcome on the K-10 was associated with age, levels of income and education, previous receipt of mental health care, number of sessions, treatment received and pre-treatment K-10 score. The benchmark was sufficiently high, however, that even the groups that fared relatively less well still showed strong improvement in absolute terms.

Conclusions

Patients are benefiting from the ATAPS projects, and the gains they are making are considerable. A range of socio-demographic, clinical and treatment-based variables are associated with the levels of outcomes achieved, but improvements are still substantial even for those in the relatively disadvantaged groups.

Chapter 1: Background

In July 2001, the Australian Government funded the Better Outcomes in Mental Health Care (BOiMHC) program in response to low treatment rates for common mental disorders. A key feature of the BOiMHC program is its Access to Allied Psychological Services (ATAPS) component, which involves a series of projects run by Divisions of General Practice (Divisions). The ATAPS projects enable GPs to refer patients with high prevalence disorders (e.g., depression and anxiety) to allied health professionals (predominantly psychologists) for low-cost, evidence-based mental health care (most commonly cognitive behavioural therapy, or CBT). This care is typically delivered in six individualised sessions, with an additional six (or sometimes 12) sessions made available if this is considered warranted after a review by the referring GP. Up to 12 group sessions are also available.¹

Various policy changes have occurred during the life of the ATAPS projects which have had an impact on their nature and direction. In 2006, the Australian Government introduced the Better Access program, which facilitates equivalent access to mental health care from similar providers, but does so via a series of Medicare Benefits Schedule (MBS) item numbers rather than through Divisional projects. The ATAPS projects have continued to run alongside the Better Access program in their original form, but several sub-programs have been or are being introduced that focus on particular at-risk populations (e.g., women with perinatal depression, people at risk of suicide, people at risk of homelessness, people affected by the Victorian bushfires, people in remote locations, children with mental disorders) and/or use specific modalities of service delivery (e.g., telephone-based or web-based CBT). The original ATAPS arrangements are now called Tier 1 services, and the sub-programs are called Tier 2 services. Tier 3 services, which will provide flexible care packages to people with severe mental illness, are currently being developed.²

Tier 1 services remain the 'core business' of the ATAPS program. Currently, 110 Divisions are running ATAPS projects which are delivering these services. The University of Melbourne's Centre for Health Policy, Programs and Economics (CHPPE) has been evaluating the Tier 1 ATAPS projects since their introduction. The evaluation has confirmed that the projects are being delivered in the way that was originally intended, under a range of models.^{3,4} It has also shown that their uptake has been high in both urban and rural areas, and that the projects have reached a broad range of patients.^{3,5-9} In addition, the evaluation has demonstrated that the projects have produced positive outcomes both for providers¹⁰ and for patients.^{7,11}

To date, the evaluation of the ATAPS program has not explored whether the Tier 1 ATAPS projects have achieved better outcomes for certain groups of patients or under particular treatment circumstances. This is an important question because it has the potential to refocus the Tier 1 projects if required, and to inform the direction of the Tier 2 and Tier 3 projects. The current report examines patient-related and treatment-related predictors of outcomes, drawing on data from a purpose-designed minimum dataset.

Chapter 2: Method

Divisions running ATAPS projects are required to enter de-identified patient-level and session-level data into a web-based minimum dataset which was developed for the purposes of the evaluation. The patient-level information includes variables describing patients' socio-demographic and clinical characteristics at referral, as well as pre- and post-treatment scores on standardised outcome measures. The session-level information includes variables that quantify the amount of treatment provided for a given patient, describe the nature of that treatment, and indicate whether the patient received care free of charge or made a co-payment.

Two points should be noted about the outcome data available in the minimum dataset. Firstly, when the ATAPS projects were originally funded, Divisions were instructed that they should encourage providers to use a standardised outcome measure to chart patients' progress, but the specific measure was left to the Division's discretion. As a consequence, over 20 different instruments are being used by Divisions, with some Divisions using more than one for the same patient.^{11 12} Secondly, the minimum dataset did not originally include outcome data fields; these were only added in mid-2005.^{11 12}

Data were extracted for the period from the beginning of January 2006 to the end of June 2010, in order to ensure that outcome data were routinely available. Preliminary descriptive analyses of the potential predictor variables were conducted, and the results are presented as simple frequencies and percentages. Paired t-tests were then used to examine the difference between mean pre- and post-treatment scores on the range of outcome measures. Patients who did not have a 'matched pair' of pre- and post-treatment scores were excluded, as were outcome measures for which there were fewer than 200 observations. Finally, a linear regression analysis was conducted using scores on the most commonly-used outcome measure as the outcome of interest, and the full range of predictor variables as covariates. Because responses within Divisions were likely to be correlated, variance was calculated using cluster-robust standard errors. Pre-treatment scores were included as a covariate. The effect of categorical predictors was assessed using the joint Wald test.

Chapter 3: Results

In total, 150,954 referrals were made via the ATAPS projects during the period of interest. These referrals resulted in 113,107 patients receiving an episode of care (i.e., between one and 18 sessions); in a relatively small proportion of cases (7%), the patient was not unique (i.e., he or she received more than one episode of care). Pre- and post-treatment outcome data were available for 16,700 patients (15% of the 113,107). The majority of these patients (60%) had outcome data from one measure only, but 13% had data from two, 21% from three, 5% from four and 1% from five.

Socio-demographic, clinical and treatment profiles

Table 1 shows the socio-demographic and clinical profiles of all patients and those for whom outcome data were available. Note that the totals do not always equal 113,107 or 16,700 because data on given variables were missing from the minimum dataset. In the main, the profiles for the two groups of patients were similar. Over two thirds of the patients in both groups were female, and two fifths were aged between 25 and 44 years. Two thirds of the patients in both groups were on low incomes, despite their being relatively well educated (with over a quarter completing tertiary education). Most commonly, the patients in both groups had a diagnosis of depression or anxiety or both. Just under half of the patients in both groups had no previous history of mental health care.

Table 1 also shows the treatment profiles for all patients and those for whom outcome data were available. Patients in the latter group were less likely to have small numbers of sessions, and more likely to have received CBT in at least one session. Roughly equivalent proportions of both groups (less than one fifth) made a co-payment at any session; the vast majority in both groups received all sessions free of charge.

Table 1: Socio-demographic, clinical and treatment profiles of patients receiving care through the ATAPS projects, 1 January 2006 to 30 June 2010

			All patients (n=113,107)		Patients for whom outcome data were available (n=16,700)	
			Frequency	Percentage	Frequency	Percentage
Socio-demographic characteristics	Gender	Male	32,021	29.6	4,333	26.9
		Female	76,140	70.4	11,804	73.1
	Age	<25 years	23,864	22.0	2,770	16.9
		25-44 years	46,180	42.5	6,863	41.9
		45-64 years	32,120	29.6	5,575	34.0
		≥ 65 years	6,448	5.9	1,171	7.1
	Income	Low income	66,724	65.6	11,056	69.8
		Not low income	21,553	21.2	3,325	21.0
		Unknown	13,499	13.3	1,468	9.3
	Education	Did not complete high school	7,960	9.9	808	6.0
		Completed high school to Year 10	25,634	31.9	4,360	32.2
		Completed high school to Year 11	8,081	10.1	1,365	10.1
		Completed high school to Year 12	18,489	23.0	3,049	22.5
Completed tertiary education		20,110	25.1	3,960	29.2	
Clinical characteristics	Diagnosis	Depression and anxiety ^a	30,340	26.8	4,616	27.6
		Depression without anxiety ^a	33,737	29.8	4,573	27.4
		Anxiety without depression ^a	17,694	15.6	2,561	15.3
		Other ^b	31,336	27.7	4,950	29.6
	Previous history of mental health care	No previous history of mental health care	44,774	45.2	6,603	43.8
		Previous history of mental health care	41,570	42.0	7,002	46.5
		Unknown	12,708	12.8	1,468	9.7
	Treatment profile	Number of sessions	1	15,265	13.5	528
2-3			26,402	23.3	2,039	12.2
4-5			22,166	19.6	2,937	17.6
6			29,477	26.1	6,281	37.6
7-12			17,305	15.3	4,230	25.3
13-18			2,492	2.2	685	4.1
Treatment received		Received cognitive behavioural therapy in at least one session ^c	77,592	68.6	13,575	81.3
		Received no cognitive behavioural therapy in any session ^d	19,115	16.9	2,520	15.1
		Unknown	16,400	14.5	605	3.6
Co-payment		Paid co-payment in at least one session	19,477	17.2	2,617	15.7
	Did not pay co-payment in any session	93,630	82.8	14,083	84.3	

- a. With or without alcohol and drug use disorders, psychotic disorders, and/or unexplained somatic disorders;
- b. Alcohol and drug use disorders, psychotic disorders, unexplained somatic disorders, and/or unknown or missing diagnoses;
- c. Includes behavioural interventions and/or cognitive interventions, with or without diagnostic assessment, psycho-education, relaxation strategies, skills training and/or interpersonal therapy;
- d. Excludes behavioural interventions and/or cognitive interventions, and includes diagnostic assessment, psycho-education, relaxation strategies, skills training and/or interpersonal therapy.

Changes on outcome measures from pre- to post-treatment

Table 2 shows the mean difference in scores on the nine most commonly-used outcome measures: the Beck Anxiety Inventory (BAI),¹³ the Behaviour and Symptom Identification Scale 32 (BASIS-32),¹⁴ the Beck Depression Inventory (BDI),¹⁵ the Depression Anxiety Stress Scales (DASS),¹⁶ the Global Assessment of Functioning (GAF),¹⁷ the General Well-Being Index (GWBI),¹⁸ the Hospital Anxiety and Depression Scale (HADS),¹⁹ the Health of the Nation Outcome Scales (HoNOS),²⁰ and the Kessler 10 (K-10).²¹ With the exception of the DASS, the mean differences were based on total scores; in the case of the DASS, the mean differences were based on scores for each of the three sub-scales because a total score on this instrument is not regarded as meaningful.¹⁶ Across all measures, the mean difference was statistically significant and indicative of clinical improvement.

Table 2: Pre- and post-treatment outcome scores on available outcome measures for patients receiving care through the ATAPS projects, 1 January 2006 to 30 June 2010

		n	Pre-treatment mean (s.d.)	Post-treatment mean (s.d.)	Mean difference (s.d.)
BAI	Patient-rated measure designed to measure anxiety. Consists of 21 items, each of which describes a common symptom of anxiety. Patients are asked to rate how much they have been bothered by each symptom over the past week on a 4-point scale ranging from 0 (Not at all) to 3 (Severely – it bothered me a lot). The total score can range from 0 to 63. A positive difference between pre- and post-treatment scores indicates improvement.	384	22.67 (12.34)	14.19 (11.81)	8.48 (10.15)*
BASIS-32	Patient-rated measure comprising 32 items which collectively measure symptoms and behavioural distress in people with a mental illness over the previous week. Each item is rated from 0 (No difficulty) to 4 (Extreme difficulty). The total score is an average of the item scores, and therefore also ranges from 0 to 4. A positive difference between pre- and post-treatment scores indicates improvement.	3,738	0.64 (0.76)	0.10 (0.29)	0.53 (0.71)*
BDI	Patient-rated measure comprising 21 items which assess depressive symptoms over the previous two weeks. Each item has a set of four possible answers, ranging from 0 to 3 where 0 is low intensity (e.g., I do not feel sad) and 3 is high intensity (e.g., I am so sad or unhappy that I can't stand it). The lowest total score is 0 and the highest is 63. A positive difference between pre- and post-treatment scores indicates improvement.	505	27.24 (12.11)	15.54 (12.09)	11.70 (11.26)*
DASS_Anxiety	Patient-rated sub-scale of the DASS designed to measure anxiety. Consists of 14 items on the DASS-42 or 7 items on the DASS-21, each of which consists of a statement relating to a symptom of anxiety. The patient is asked to consider how much each statement applied to him or her in the past week. Each item is scored from 0 ('Did not apply to me at all') to 3 (Applied to me very much, or most of the time'). The sub-scale score on the DASS-42 ranges from 0 to 42; the raw sub-scale score on the DASS-21 ranges from 0 to 21 but is then doubled so that it also ranges from 0 to 42. A positive difference between pre- and post-treatment scores indicates improvement.	4,442	15.83 (9.98)	9.55 (8.46)	6.28 (8.58)*
DASS_Depression	Patient-rated sub-scale of the DASS designed to measure depression. Consists of 14 items on the DASS-42 or 7 items on the DASS-21, each of which consists of a statement relating to a symptom of depression. The patient is asked to consider how much each statement applied to him or her in the past week. Each item is scored from 0 ('Did not apply to me at all') to 3 (Applied to me very much, or most of the time'). The sub-scale score on the DASS-42 ranges from 0 to 42; the raw sub-scale score on the DASS-21 ranges from 0 to 21 but is then doubled so that it also ranges from 0 to 42. A positive difference between pre- and post-treatment scores indicates improvement.	4,450	20.67 (11.11)	11.73 (9.82)	8.94 (10.29)*
DASS_Stress	Patient-rated sub-scale of the DASS designed to measure stress. Consists of 14 items on the	4,371	22.61 (9.90)	14.44 (9.36)	8.17 (9.67)*

	DASS-42 or 7 items on the DASS-21, each of which consists of a statement relating to a symptom of stress. The patient is asked to consider how much each statement applied to him or her in the past week. Each item is scored from 0 ('Did not apply to me at all') to 3 (Applied to me very much, or most of the time'). The sub-scale score on the DASS-42 ranges from 0 to 42; the raw sub-scale score on the DASS-21 ranges from 0 to 21 but is then doubled so that it also ranges from 0 to 42. A positive difference between pre- and post-treatment scores indicates improvement.				
GAF	Clinician-rated measure of functioning which seeks a single rating from 1 (Persistent danger of severely hurting self or others OR persistent inability to maintain minimal personal hygiene OR serious suicidal act with clear expectation of death) to 100 (Superior functioning in a wide range of activities, life's problems never seem to get out of hand, is sought out by others because of his/her many positive qualities. No symptoms). A negative difference between pre- and post-treatment scores indicates improvement.	992	58.13 (9.13)	69.29 (11.03)	-11.16 (8.10)*
GWBI	Patient-rated measure comprising 22 items designed to establish how he or she has been feeling during the past 2 weeks. Each item is scored from 0 to 5, with 0 indicating low general well being and 5 indicating high general well being. The total score ranges from 0 to 88. A negative difference between pre- and post-treatment scores indicates improvement.	221	39.10 (15.48)	53.76 (16.20)	-14.66 (17.37)*
HADS	Patient-rated measure developed to detect anxiety and depression in a non-psychiatric hospital setting. Comprises 14 items, seven of which are concerned with anxiety and seven of which are concerned with depression. Each item is scored from 0 to 3, where 0 indicates low levels of symptomatology in the previous week and 3 indicates high levels. The total score ranges from 0 to 42. A positive difference between pre- and post-treatment scores indicates improvement.	331	19.11 (6.75)	9.41 (5.96)	9.70 (6.65)*
HoNOS	Clinician-rated measure of severity of symptoms in people with a mental illness which covers the previous two weeks. Comprises 12 items that collectively cover the sorts of problems that may be experienced by people with a mental illness. Each item is rated from 0 (No problem) to 4 (Very severe problem), resulting in a total score that can range from 0 to 48. A positive difference between pre- and post-treatment scores indicates improvement.	1,965	11.91 (5.01)	6.53 (4.65)	5.38 (4.05)*
K-10	Patient-rated measure developed to assess non-specific psychological distress. Comprises 10 items which ask the patient about symptoms of depression and anxiety in the past four weeks. Each item is rated from 1 (None of the time) to 5 (All of the time), resulting in a total score that ranges from 10 to 50. A positive difference between pre- and post-treatment scores indicates improvement.	7,747	31.29 (7.96)	22.68 (8.48)	8.61 (8.36)*

* p <0.001

Predictors of improvement on outcome measures

Table 3 considers predictors of outcome as assessed by the most common measure used by Divisions, the K-10. As noted in Table 2, the K-10 is a patient-rated measure which assesses non-specific psychological distress and yields a total score of 10 to 50. A low score indicates low levels of stress and a high score indicates high levels of stress, so a positive difference between pre- and post-treatment scores indicates improvement.²¹

Analysis of the residuals from the fitted model (not shown) supported the assumptions of constant variance and normally distributed errors. Table 3 shows that after adjusting for clustering by Division and controlling for the other variables in the model, outcome on the K-10 was associated with age, level of income, level of education, previous receipt of mental health care, number of sessions, treatment received and pre-treatment K-10 score. Outcome was not associated with gender, diagnosis or co-payment.

To be more specific, those in the older age group (≥ 65 years) showed an incremental improvement of 1.79 points on the K-10 over and above their younger counterparts (those aged <25 years). Those on relatively higher incomes had a level of improvement that was 1.55 points higher than those on low incomes. Those who had completed high school to some level or had completed a tertiary qualification experienced improvements of between 1.36 and 1.58 points higher than those who had not completed high school. Those who had not received previous mental health care showed levels of improvement that were 1.38 points higher than those who had done so. Those who received 13-18 sessions of care showed lower levels of improvement than those who received six sessions (1.50 points lower). Those who had no categorised treatment fared relatively poorly, showing levels of improvement that were 2.37 points lower than those who received CBT. Finally, improvements rose as a function of pre-treatment K-10 scores, doing so at a rate of 0.53 points per each additional one-point increase on the pre-treatment score.

Table 3: Coefficients and 95% confidence intervals predicting change in Kessler-10 Scores

Covariate	Coefficient (95% CI)	P-value
Gender		0.794
Male	1.0	
Female	0.06 (-0.41 to 0.53)	0.794
Age		0.004
<25 years	1.0	
25-44	0.18 (-0.40 to 0.76)	0.533
45-64	0.02 (-0.59 to 0.64)	0.944
≥65	1.79 (0.66 to 2.93)	0.002
Income		<0.001
Low income	1.0	
Not low income	1.55 (0.79 to 2.30)	<0.001
Unknown	0.36 (-0.61 to 1.32)	0.465
Education		0.008
Did not complete high school	1.0	
Completed high school to Year 10	1.50 (0.49 to 2.51)	0.004
Completed high school to Year 11	1.36 (0.57 to 2.15)	0.001
Completed high school to Year 12	1.42 (0.49 to 2.35)	0.003
Completed tertiary education	1.58 (0.61 to 2.55)	0.002
Diagnosis		0.243
Depression and anxiety	-0.61 (-2.00 to 0.78)	0.384
Depression without anxiety	0.27 (-0.90 to 1.45)	0.643
Anxiety without depression	1.01 (-0.55 to 2.57)	0.199
Other	1.0	
Previous history of mental care		<0.001
No previous history of mental health care	1.38 (0.90 to 1.86)	<0.001
Previous history of mental health care	1.0	
Unknown	-0.21 (-1.17 to 0.75)	0.661
Number of sessions		0.002
1	0.75 (-1.17 to 2.66)	0.438
2-3	1.25 (-0.09 to 2.60)	0.067
4-5	0.99 (-0.54 to 2.51)	0.200
6	1.0	
7-12	-0.11 (-1.10 to 0.88)	0.822
13-18	-1.50 (-2.58 to -0.43)	0.007
Treatment Received		<0.001
Received cognitive behavioural therapy in at least one session	1.0	
Received no cognitive behavioural therapy in any session	-0.52 (-1.42 to 0.38)	0.251
Unknown	-2.89 (-3.92 to -1.86)	<0.001
Co-payment		0.524
Paid co-payment in at least one session	0.50 (-1.06 to 2.06)	0.524
Did not pay co-payment in any session	1.0	
Pre-test score	0.50 (0.47 to 0.58)	<0.001
Intercept	-10.47 (-12.82 to 8.12)	<0.001

Chapter 4: Discussion and conclusions

Interpreting the findings

The ATAPS projects are yielding positive outcomes for patients, irrespective of the way in which these outcomes are being measured. These outcomes are not only statistically significant; they are clinically significant too. Many patients shift from quite extreme levels of symptomatology to much lower ones. Taking normative data from the K-10 as an example, the mean pre-treatment score of 31.29 is indicative of a severe mental disorder (range: 30-50), whereas the mean post-treatment score of 22.68 is suggestive of mild mental disorder (range: 20-24).^{21,22}

Some ATAPS patients appear to do better than others, although even for the latter the level of improvement is high. In terms of socio-demographic characteristics, older patients and patients who are of relatively higher socio-economic status make the greatest gains. The former finding requires further exploration; it is not intuitively clear why older patients would fare better than their younger counterparts. The latter finding is consistent with the contention that CBT may be more successful with patients who are relatively well educated, although other studies have produced equivocal findings in this regard. For example, a 2002 review by Hamilton and Dobson²³ found little evidence for such a relationship, whereas a more recent study by Myhr et al²⁴ found that employment status was predictive of positive outcomes from CBT.

In terms of clinical characteristics, those who have no previous history of mental health care show greater levels of improvement than those who have previously received treatment. One interpretation of this finding might be that those who are new to the system – especially those who have had difficulties accessing services in the past – may be particularly likely to be compliant with treatment. Independent of this finding, those with comparatively higher pre-treatment K-10²¹ scores (i.e., worse baseline manifestations of psychological distress) demonstrate greater levels of improvement than those with lower pre-treatment scores. This finding is consistent with a recent study by Prytys et al²⁵ which found that those who were above clinical cut-offs on given measures of depression benefited more from CBT workshops than those who scored below this threshold at presentation. The current finding is at odds, however, with the previously mentioned review by Hamilton and Dobson²³ which found that, on balance, individuals with more extreme symptoms of depression appeared to be less responsive to CBT. One explanation for the pattern observed here may be that those with higher original scores may not only have greater opportunities to improve before they hit a 'floor' score. Another explanation may be that, arguably, they have more 'invested' in treatment.

The findings regarding the relationship between treatment variables and outcome indicators suggest that the ATAPS projects have 'got it right' with respect to service delivery. Some have argued that six sessions of care are insufficient, but the current analysis would suggest that they are not only sufficient but perhaps optimal in many cases; greater numbers of sessions are associated with poorer outcomes, even after taking into account factors such as baseline levels of morbidity (as assessed by the K-10²¹) and diagnosis. Some have also suggested that the recommended list of therapies available through ATAPS is too prescriptive, and that the focus on evidence-based care (particularly CBT) potentially excludes other useful strategies. The fact that those who receive CBT have better outcomes than those who receive unknown or unclassified treatment provides suggestive, though not conclusive, evidence that the overarching treatment approach of ATAPS is appropriate.

Limitations

Several caveats should be taken into account in considering the above interpretation of the findings. Firstly, the proportion of patients for whom pre- and post-treatment outcome data were available was less than optimal at 15%. It is possible that this may have introduced a systematic bias, such that those for whom no outcome data were available may have had poorer outcomes (if, for example, outcome data were unavailable because they dropped out of treatment). The profile of the patients for whom outcome data were available was fairly similar to that of all patients, although they tended to have fewer sessions and be less likely to receive CBT, which may have had an impact on their outcomes. The findings still stand, but they may present a somewhat over-optimistic picture. At the very least, it is possible to say with certainty that the outcomes of care from the ATAPS projects are excellent for the thousands of patients observed here.

Secondly, it has been beyond the scope of CHPPE's ATAPS evaluation work to include any sort of comparison group because of the widespread uptake by Divisions of the ATAPS projects. Without a control group, it is not possible to determine the degree of improvement that might have occurred in the absence of treatment, although it is unlikely that this would match the magnitude of improvement shown here. It is also worth reiterating that patients typically experienced high levels of psychological distress prior to treatment, indicating that the ATAPS projects are reaching people with severe symptomatology. This group may have disorders that would be less likely to resolve if left untreated than their counterparts with moderate or mild symptomatology.

Finally, the examination of potential predictors of outcome was restricted to those variables which were available through the minimum dataset. These were reasonably comprehensive, but did not include some of the contextual factors that may have a significant impact on how well a patient responds to treatment (e.g., his or her support networks). In addition, they did not include alternative forms of therapy that the patient may have been receiving alongside care provided through the ATAPS projects. Ideally, it would have been desirable to control for medications that a patient may have been taking, since this may have influenced his or her outcomes. Data on medication use collected via the minimum dataset were not sufficiently detailed to permit this refinement to the analysis.

Implications for the ATAPS projects

The above findings suggest that the Tier 1 ATAPS projects are achieving the aim encompassed in the title of the overarching program – better outcomes in mental health care. Although these outcomes are more consistently achieved for some groups than others, the benchmark is sufficiently high that even the groups that fare relatively less well are still showing strong improvement in absolute terms. There does not appear to be a case for restructuring the Tier 1 projects, although consideration might be given to ways of optimising outcomes for all groups. Similarly, there does not appear to be evidence to suggest that particular groups who are targeted by the Tier 1 projects might be better served by the more tailored Tier 2 or Tier 3 projects. Essentially, the findings are supportive of retaining the status quo with respect to Tier 1 projects.

From an evaluation perspective, more comprehensive collection and collation of outcome data would be desirable, as would rationalising the number of outcome measures used by Divisions (perhaps to the most common two, the K-10²¹ and the DASS¹⁶). Strengthening the ATAPS outcome data collection in this way would enable more definitive statements about the achievements of the projects to be made.

Conclusions

Patients are benefiting from the ATAPS projects, and the gains they are making are considerable. A range of socio-demographic, clinical and treatment-based variables are associated with the levels of outcomes achieved, but improvements are still substantial even for those in the relatively disadvantaged groups. Divisions have worked hard to tailor their ATAPS projects to local needs,⁴ so it is perhaps not surprising that the current findings are positive.

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