



Evaluating the Access to Allied Psychological Services component of the Better Outcomes in Mental Health Care program

**Fourth interim report for the evaluation of the Specialist Services for
Consumers at Risk of Suicide: Improving access to and outcomes from
mental health care**

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Executive summary

Background

Introduced in 2001, the Access to Allied Psychological Services (ATAPS) projects, a key component of the Better Outcomes in Mental Health Care program, supports GPs and allied health professionals to collaborate to provide optimal mental health care. Specifically, the ATAPS component enables GPs to refer consumers with high prevalence disorders to allied health professionals for up to 12 sessions of evidence-based mental health care (or 18 in exceptional circumstances). ATAPS projects are operating in all 110 Divisions of General Practice (Divisions), several via fund holding arrangements.

In June 2008, the Australian Commonwealth Department of Health and Ageing provided additional funding to 19 Divisions to pilot the Specialist Service for Consumers at Risk of Suicide (Specialist Services) as a sub-program of the ATAPS projects. The pilot facilitates a more intensive, prioritised service for people who are at risk of suicide (e.g., those who have made a recent suicide attempt, have recently self-harmed, or are having severe suicidal thoughts), who may or may not have a mental disorder.

The University of Melbourne's Centre for Health Policy, Programs and Economics (CHPPE) has been evaluating the general ATAPS projects and its sub-programs since their respective introductions.

The current report considers the ongoing achievements of the Specialist Services pilot. It considers the level of uptake by GPs, emergency departments, allied health professionals and consumers at risk of suicide; the socio-demographic and clinical profile of these consumers; the precise nature of services being delivered; and the consumer outcomes.

Method

The report draws on data from a purpose-designed minimum dataset which collects consumer- and session-based data on the projects. It considers the achievements of the Specialist Services via the following evaluation questions:

Evaluation Question 1: What is the level of uptake of the Specialist Services by GPs, emergency departments, allied health professionals, and consumers?

Evaluation Question 2: What is the socio-demographic and clinical profile of consumers accessing Specialist Services?

Evaluation Question 3: What is the precise nature of the care being delivered via the Specialist Services?

Evaluation Question 4: What are the consumer outcomes being achieved by the Specialist Services?

Key findings

What is the level of uptake of Specialist Services by GPs, emergency departments, allied health professionals and consumers?

Uptake data was available for 18 (of the 19 funded) Divisions which had entered data into the minimum data set as at 24 January 2011. For the period 1 October 2008 to 24 January 2011, referrals were made by 636 GPs and sessions were conducted by 167 allied health professionals.

Whilst the majority of referrals to the services were made by GPs (79%), 18% were made by emergency departments and 3% were made by community mental health services. The vast majority (n=188) of the referrals made by emergency departments were in urban areas, with only four such referrals in rural areas. These trends in referral are consistent with the period 1 October 2008 to 28 June 2010 presented in the third interim report of the Specialist Services.

Between 1 October 2008 and 24 January 2011, 1,401 referrals (399 rural and 1,002 urban) were made to the Specialist Services. This represents a 54% increase in referrals since June 2010.

Overall, 6,910 sessions (2,184 rural, 4,726 urban) were delivered via the Specialist Services pilot between 1 October 2008 and 24 January 2011, representing an increase of 2,647 sessions reported since June 2010. These 6,910 sessions were delivered to 1,255 (or 90% of the referred) consumers, making the average number of sessions provided to consumers 5.5, which represents a slight increase in the average number of sessions delivered as at June 2010.

Overall, a greater proportion of referrals (72%) and sessions (68%) were in urban compared to rural areas. Since starting to rise in late 2008, the number of sessions and referrals in urban and rural areas appears to have reached a level of relative stability with some fluctuation. Greater variability in the rate of referrals and sessions was observed in rural areas than in urban areas, with the decline nationally in the last quarter likely to be attributable to data entry lags.

What is the socio-demographic and clinical profile of consumers accessing Specialist Services?

Around three-fifths of consumers of Specialist Services were female, and their mean age was approximately 32 years. Over half were on low incomes, as judged by their GP. About two fifths of the consumers had not previously accessed mental health care. Less than 2% of consumers were reported to be Aboriginal, and less than 1% Torres Strait Islander. A diagnosis was made by the referring GP (or in a minority of instances other professional) for 71% (n = 998) of the 1,401 referrals made. For these 998 referrals, the vast majority had been diagnosed with depression (89%). In the main, the profiles of rural and urban consumers were similar. However, there was a trend for rural consumers to be somewhat: more likely to be male, younger, and Aboriginal, and less likely to have an alcohol and drug use disorder or a psychotic or anxiety disorder than urban consumers. The profile of Specialist Services' consumers differed from that of the general ATAPS projects' consumers.

What is the precise nature of the care being delivered via the Specialist Services?

Sessions of 46-60 minutes accounted for two thirds of Specialist Services. More sessions conducted via the Specialist Services were less than 30 minutes when compared with the national general ATAPS services. Session interventions differed between urban and rural areas and from the national general ATAPS projects. Overall and in urban areas, these sessions were more likely to involve diagnostic assessment, CBT-cognitive interventions, and CBT-behavioural interventions. However, sessions in rural areas were most likely to involve CBT-skills training and to deliver this intervention than their urban counterparts. For the vast majority of Specialist Services sessions no copayment was reported.

What are the consumer outcomes being achieved by the Specialist Services?

Investigation of all the available outcome data indicated that 234 (19%) consumers had pre and post scores on at least one outcome measure. Of the 234 consumers, 188 had been assessed with the Modified Scale for Suicidal Ideation (MSSI), 88 with the Depression Anxiety and Stress Scales (DASS), and 77 with the Kessler 10 (K10). The Specialist Services pilot was achieving positive outcomes for consumers as evidenced by statistically and clinically significant levels of improvement across all outcome measures examined.

Conclusions

The current report confirms the status of the Specialist Services as a valuable and complementary sub-program of the general ATAPS projects. The Specialist Services have continued to attract referrals from GPs and emergency departments. Correspondingly, allied health professionals have delivered increasing numbers of sessions to a significant number of consumers. The profile of consumers continues to be fairly consistent over time and somewhat different from the general ATAPS projects suggesting that these Specialist Services are reaching a different group of consumers who are more likely to be younger, males and to have a diagnosis of depression. The nature of services being delivered remains at a point of relative consistency, which varies from that of general ATAPS and between rural and urban areas. The vast majority of consumers are receiving a free of cost service. There is good evidence that the pilot is achieving positive outcomes for consumers in terms of alleviating symptoms and improving levels of functioning.

Chapter 1: Background

The Better Outcomes in Mental Health Care (BOiMHC) program, which was introduced by the Australian Commonwealth Department of Health and Ageing (DoHA) in response to low treatment rates for common mental disorders, has been operating since July 2001. The Access to Allied Psychological Services (ATAPS) projects, a key component of the BOiMHC program, supports GPs and allied health professionals to collaborate to provide optimal primary mental health care. Specifically, the ATAPS component enables GPs to refer consumers with high prevalence disorders (e.g., depression and anxiety) to allied health professionals for up to 12 (or up to 18 in exceptional circumstances) individual and/or group sessions of evidence-based mental health care (predominantly Cognitive Behavioural Therapy, or CBT). Review by the referring GP is essential particularly if more than six (or 12 in exceptional circumstances) sessions are required. The ATAPS projects are operating in all 110 Divisions of General Practice (Divisions), several via fund holding arrangements.

During the life of the ATAPS projects, several sub-programs have been 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). Flexible Care Packages for people with severe mental illness are also being implemented via ATAPS in 2011.

Suicide continues to be a major public health issue. There were 1,881 deaths from suicide in 2007 in Australia. Males accounted for over three-quarters of these deaths.¹ Many of these people may not have a mental illness or access to specialised mental health care and many may have visited a GP during that time.² In response to these issues, in mid-2008, DoHA provided funding to 19 Divisions (see Appendix A) to pilot the Specialist Services for Consumers at Risk of Suicide (Specialist Services), as a sub-program of the general ATAPS projects. These projects offer a more intensive, prioritised service for people who are at risk of suicide (e.g., those who have made a recent suicide attempt, have recently self-harmed, or are having severe suicidal thoughts), who may or may not have a mental disorder. These Divisions were selected by DoHA on the basis of their capacity to deliver such a service, and in a manner that ensures representation from all states and territories. These Divisions were provided with additional funds to secure the services of specialised allied health professionals to provide intensive care and follow-up to referred consumers. The Specialist Services pilot projects differ from the general ATAPS projects in a number of ways. The unique features of the Specialist Services pilot are summarised in Table 1.

The University of Melbourne's Centre for Health Policy, Programs and Economics (CHPPE) has been evaluating the general ATAPS projects and its sub-programs since their respective introductions. To date, 16 interim reports³⁻¹⁸ have evaluated the general ATAPS projects and eight have evaluated ATAPS sub-programs,¹⁹⁻²⁶ three of which have specifically reported on the Specialist Services pilot.¹⁹⁻²¹

The ongoing evaluation of the Specialist Services pilot has confirmed that it has been positively viewed by Divisions, allied health professionals, emergency departments and general practitioners, as a quick and effective service response to consumers of mild to moderate suicide risk. The Specialist Services pilot has steadily attracted referrals from GPs and emergency departments and provided allied health professional psychological services to consumers. Consumers of the Specialist Services pilot have differed to those of the general ATAPS projects in that they have been younger, less likely to be on a low income and to be diagnosed with anxiety, and more likely to be males diagnosed with depression and to have previously used psychiatric services. Similarly, the care provided under the Specialist Services pilot has differed to that of the general ATAPS projects in that more sessions have been conducted in less than 30 minutes and have involved diagnostic assessment and CBT-skills training, and no copayment has been associated with any sessions.

Table 1: Unique features of the Specialist Services pilot

Unique features of Specialist Services pilot
<ul style="list-style-type: none">• Focus on the treatment and care of three groups of individuals:<ul style="list-style-type: none">○ People who have been discharged into the care of GPs from hospital, including emergency departments or from a medical ward following an overnight admission after a suicide attempt;○ People who have presented to GPs after an incident of self harm; and○ People who have expressed strong suicidal ideation to their GPs.• Consumers are not required to have a mental health diagnosis.• The treating allied health professional is required to speak to the consumer within 24 hours of referral and to see the consumer for the first treatment session within 72 hours of referral or earlier if necessary.• Provision by Department of Health and Ageing of an afterhours support phone service for consumers.• No limit on the number of sessions.• Specialist Services' support is expected be more intense than general ATAPS' support and sessions are to be conducted in a condensed time period of up to two months.• A provisional referral can be made to the Specialist Services projects by designated emergency department personnel to allow immediate contact with an allied health professional, followed by a GP referral within one week.• Local protocols were developed by Divisions for the referral pathways via emergency departments.• Training is mandatory for allied health professionals participating in the Specialist Services pilot and is delivered via DVD training modules developed by the Australian Psychological Society.• Probationary allied health professional providers are not eligible to provide these services.

The current report considers the ongoing achievements of the Specialist Services pilot. It considers not only the level of uptake by GPs, emergency departments, allied health professionals and consumers at risk of suicide; the socio-demographic and clinical profile of these consumers; and the precise nature of services for consumers, but also the outcomes achieved for consumers.

Chapter 2: Method

Evaluation questions

This report considers the progressive achievements of the Specialist Services component of the ATAPS projects, via the following evaluation questions:

Evaluation Question 1: What is the level of uptake of Specialist Services by GPs, emergency departments, allied health professionals, and consumers?

Evaluation Question 2: What is the socio-demographic and clinical profile of consumers accessing Specialist Services?

Evaluation Question 3: What is the precise nature of care being delivered via the Specialist Services?

Evaluation Question 4: What are the consumer outcomes being achieved by the Specialist Services?

Data sources

All four evaluation questions were addressed using data from a purpose-designed web-based minimum dataset, which captures de-identified, consumer-level and session-level information, as well as pre- and post-treatment scores on standardised outcome measures.

Data from the minimum dataset was downloaded from the minimum dataset on 24 January 2011. The analysis period was from 1 October 2008 to 24 January 2011.

Of the 19 Divisions involved in the Specialist Services pilot, 18 submitted data to the minimum dataset during this period (7 rural, 11 urban).^a

Data analysis

In order to answer evaluation questions one to three, descriptive analyses of the uptake of the Specialist Services and consumer- and session-profiles were conducted, with the results presented as simple frequencies and percentages.

In order to answer evaluation question four, paired t-tests were used to examine the difference between mean pre- and post-treatment scores on selected outcome measures. Consumers who did not have a 'matched pair' of pre- and post-treatment scores were excluded.

^a After producing this report, it was discovered that the 19th Division for which no data is included in this report, has delivered Specialist Services for Consumers of Risk of Suicide. However, this data was not available on the minimum dataset due to technical issues, which are currently being addressed via the Division's information systems provider in consultation with Strategic Data.

Chapter 3: What is the level of uptake of Specialist Services by GPs, emergency departments, allied health professionals and consumers?

Uptake data was available for 18 (of the 19 funded) Divisions which had entered data into the minimum data set as at 24 January 2011.

Uptake by GPs, allied health professionals, and emergency departments

Table 2 presents the number of GPs and allied health professionals participating in the Specialist Services pilot nationally and in rural and urban Divisions. Nationally, for the period from 1 October 2008 to 24 January 2011, referrals were made by 636 GPs and sessions were conducted by 167 allied health professionals in the 18 Divisions. This represents increases of 43% and 28% of participating GPs and allied health professionals, respectively, since June 2010.²¹ Almost one third of GPs and allied health professionals were from rural areas.

Table 2: Number of GPs and allied health professionals participating in the Specialist Services

	National n (%)	Rural n (%)	Urban n (%)
General Practitioners	636 (100%)	194 (30.5%)	442 (69.5%)
Allied health professionals	167 (100%)	53 (31.7%)	114 (68.3%)

Referral sources

Table 3 shows a summary of referral sources; these data were available for 1,103 (182 rural and 921 urban) of the 1,401 referrals made. Emergency departments were responsible for one fifth of referrals in urban areas. The majority of referrals came from GPs, especially in rural areas. This trend has remained relatively consistent over the life of the services, with the only notable difference being a decrease in the proportion of referrals received from emergency departments in urban areas over time.^{20,21} This trend may be attributable to the increased participation by GPs.

Table 3: Summary of referral sources for the Specialist Services

	National n (%)	Rural n (%)	Urban n (%)
Community Mental Health Services	36 (3%)	1 (1%)	35 (4%)
Emergency Department	192 (18%)	4 (2%)	188 (20%)
GPs	875 (79%)	177 (97%)	698 (76%)

Uptake by consumers

Between 1 October 2008 and 24 January 2011, 1,401 referrals (399 rural and 1,002 urban) were made to the Specialist Services.^b This represents a 54% increase in referrals since June 2010.²¹

Specialist Services pilot projects reported delivering 6,910 sessions (2,184 rural, 4,726 urban) between 1 October 2008 and 24 January 2011, representing an increase of 2,647 sessions (from 4,263 sessions; 1,328

^b Eight referrals and six sessions which were inaccurately recorded on the MDS as preceding 1/10/2008, were included in the uptake figures.

rural and 2,935 urban) reported since the October 2008 to June 2010 period.²¹ These 6,910 sessions were delivered to 1,255 (or 90% of the referred) consumers, making the average number of sessions provided to consumers 5.5, which represents a slight increase in the average number of sessions delivered since the October 2008 to June 2010 period.²¹

Figure 1 shows referrals and sessions by month for the 18 participating projects from 1 October 2008 to 24 January 2011. Figures 2 and 3 show these referrals and sessions by month broken down into rural and urban projects. Note that in the time period October 2008 to July 2009 only fifteen projects had provided data to the minimum data set regarding the Specialist Services, by January 2010 an additional two projects had provided data, and by June 2010 one more project provided data.

Overall, there were a greater proportion of referrals (72%) and sessions (68%) in urban compared to rural areas. Since starting to rise in late 2008, the number of sessions and referrals in urban and rural areas appears to have reached a level of relative stability with some fluctuation. The figures continue to show greater variability in referrals and sessions in rural areas than in urban areas, with the decline nationally in the last quarter likely to be attributable to data entry lags.

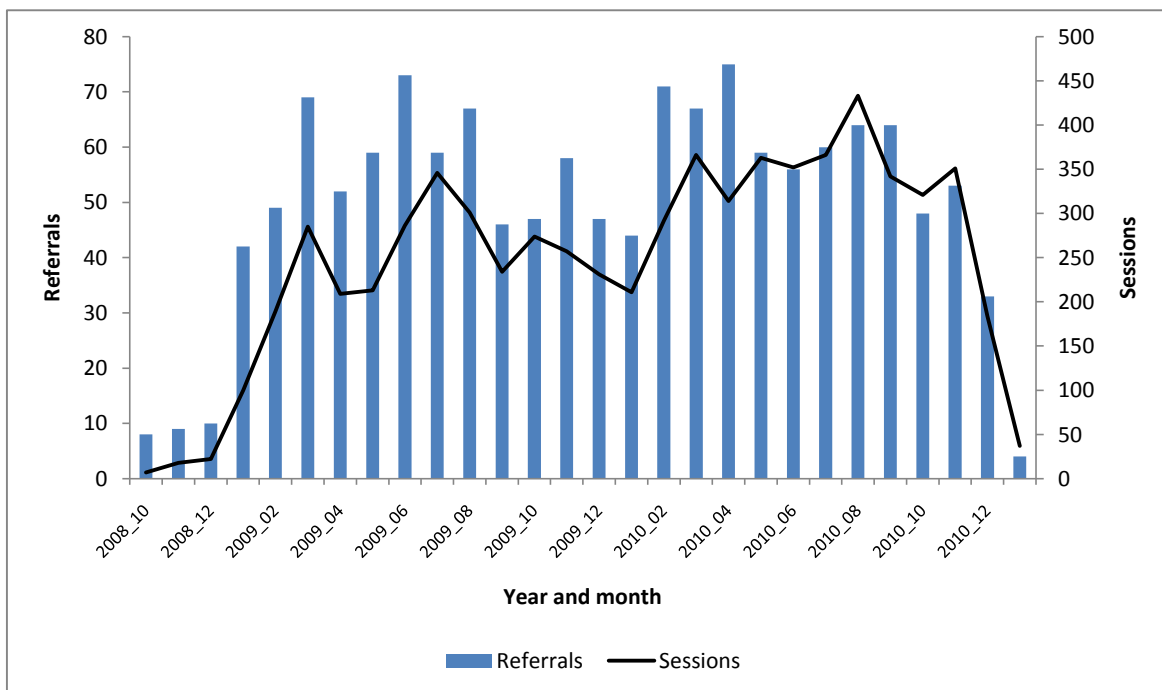


Figure 1: Referrals for sessions of care through the Specialist Services, by month (all participating Divisions).

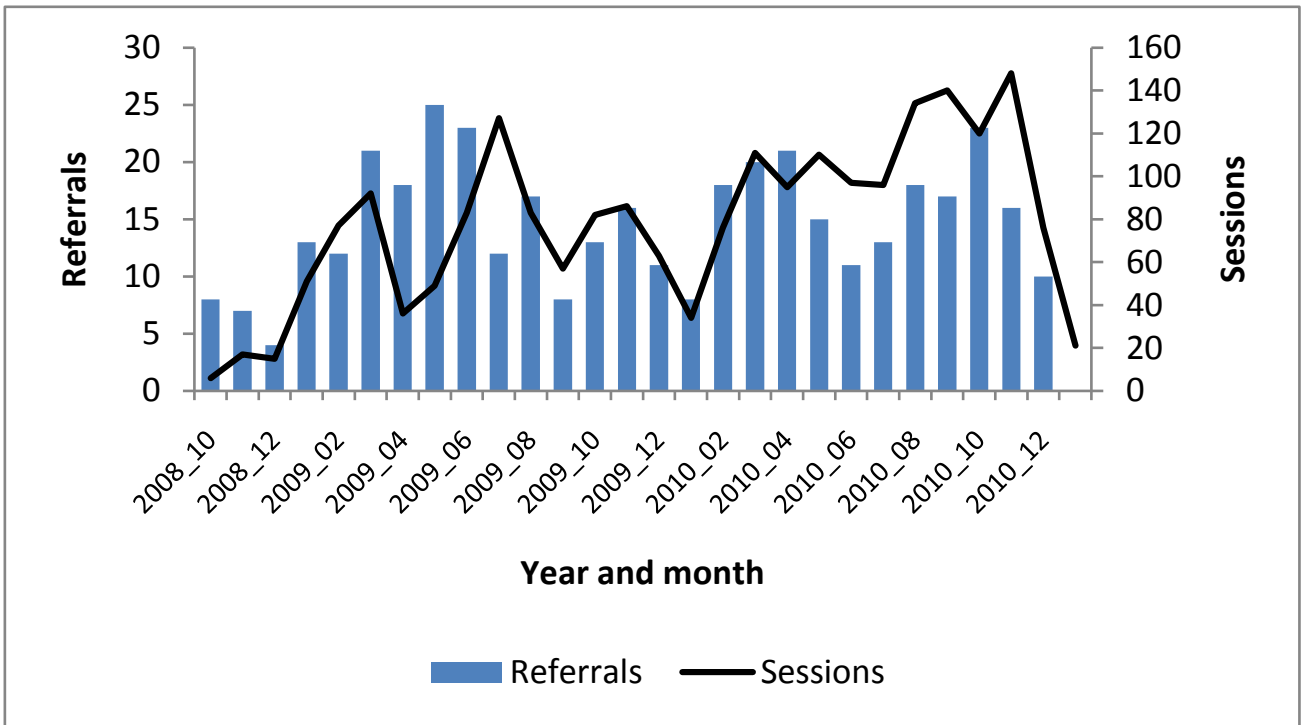


Figure 2: Referrals for sessions of care through the Specialist Services, by month (rural Divisions).

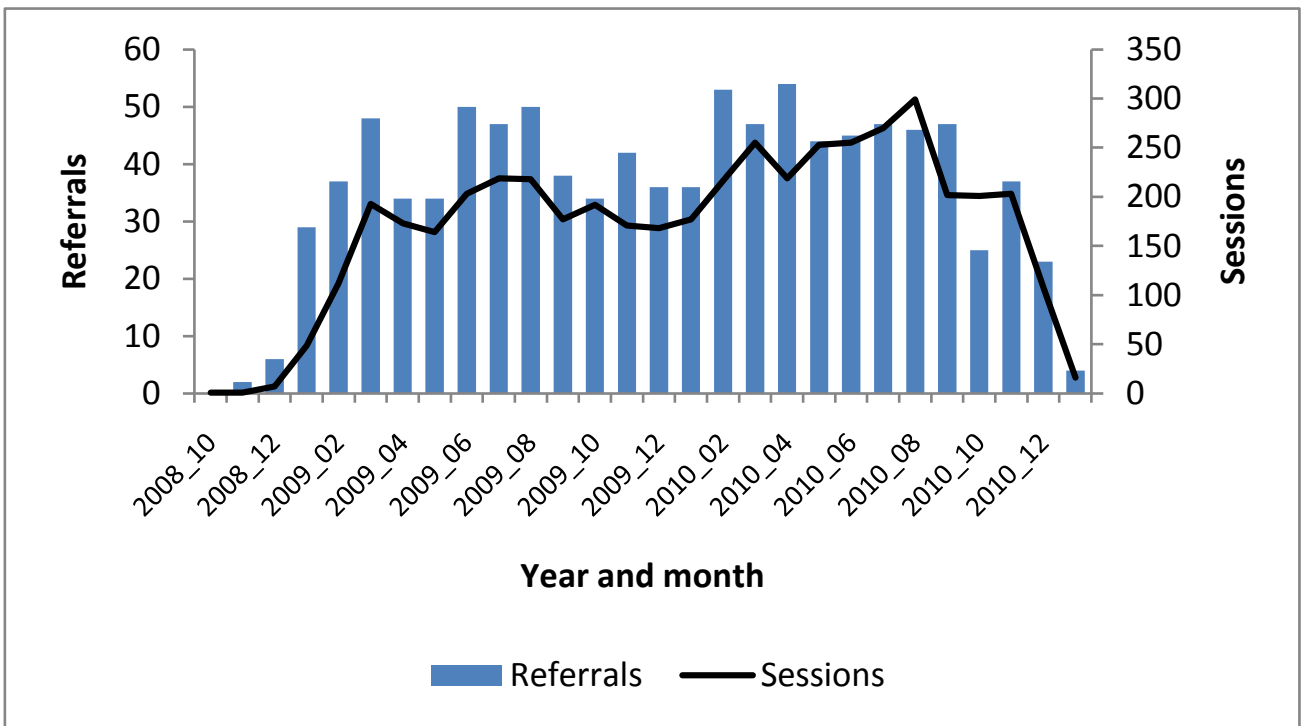


Figure 3: Referrals for sessions of care through the Specialist Services, by month (urban Divisions).

Chapter 4: What is the socio-demographic and clinical profile of consumers accessing the Specialist Services?

Table 4 summarises some of the key characteristics of the consumers receiving care through the Specialist Services between 1 October 2008 and 24 January 2011, displaying data at the national, rural, and urban levels.

Nationally, around three-fifths of consumers of the Specialist Services were female, and their mean age was approximately 32 years, with a standard deviation of 14 years and a range of between 0 and 85 years. Over half were on low incomes, as judged by their GP. About two fifths of the consumers had not previously accessed mental health care. Less than 2% of consumers were reported to be Aboriginal, and less than 1% Torres Strait Islander. The diagnostic field was completed, according to one of the six categories on the minimum dataset (including 'unknown'), for 71% (n = 998) of the 1,401 referrals made. For these 998 referrals, the vast majority had been diagnosed with depression (89%) and about one third had been diagnosed with anxiety. In the remaining instances, 'other diagnosis' was selected, with many but not all of the specifiers being indicative of variants of suicidal ideation or behaviour or self-harm.

In the main, the profiles of rural and urban consumers were similar. However, there was a trend for rural consumers to be somewhat: more likely to be male, younger, and Aboriginal, and less likely to have an alcohol and drug use disorder, psychotic, or anxiety disorder than urban consumers.

In comparison to aggregated national general ATAPS consumers,^{17 18} overall the consumers at risk of suicide continued to be younger, were more likely to be male, and less likely to be on a low income. If diagnosed, consumers at risk of suicide were more likely to have a diagnosis of depression and less likely to be diagnosed with an anxiety disorder than national general ATAPS consumers. Although a relatively small number of consumers of both the general ATAPS projects and of the Specialist Services had been diagnosed with psychotic disorders, the proportion of Specialist Services consumers with a psychotic disorder particularly in urban areas was twice that of the general ATAPS consumers.¹⁷

Table 4: Summary characteristics of consumers receiving care through the Specialist Services

	National	Rural	Urban
Gender			
Female	63.4%	61.9%	64.0%
Male	36.6%	38.1%	36.0%
Mean age	32.2	31	32.8
Low income			
Yes	54.9%	55.1%	54.8%
No	23.0%	24.9%	22.2%
Unknown	22.1%	20.0%	23.0%
Previous psychiatric service use			
Yes	42.8%	41.8%	43.2%
No	38.9%	36.1%	40.1%
Unknown	18.3%	22.1%	16.7%
Aboriginal			
Yes	1.5%	2.8%	0.9%
No	76.1%	67.2%	79.8%
Unknown	22.4%	30.0%	19.3%
Torres Strait Islander			
Yes	0.6%	1.1%	0.4%
No	76.0%	68.8%	78.9%
Unknown	23.4%	30.1%	20.7%
Diagnosis^a			
Alcohol and drug use disorders	7.6%	5.0%	8.6%
Psychotic disorders	3.7%	2.2%	4.3%
Depression	88.6%	88.8%	88.5%
Anxiety disorders	35.0%	33.5%	35.6%
Unexplained somatic disorders	1.0%	1.1%	1.0%
Unknown	1.4%	1.8%	1.3%

a. Multiple responses permitted

Chapter 5: What is the precise nature of the care being delivered via the Specialist Services?

In total 6,910 sessions of care were provided through the Specialist Services to 1,255 consumers, making the average number of sessions provided to consumers 5.5. This represents a slight increase in the average number of sessions delivered as at June 2010. The profile of these sessions is shown in Table 5 detailing national, rural, and urban data.

Almost all sessions comprising the Specialist Services pilot were delivered to individuals. Sessions of 46-60 minutes accounted for two thirds of Specialist Services delivered nationally. More Specialist Services sessions conducted in rural areas were 30 minutes or less when compared with urban areas. Specialist Services session interventions differed between urban and rural areas. Overall and in urban areas, these sessions were more likely to involve diagnostic assessment, CBT-cognitive interventions, and CBT-behavioural interventions. However, sessions in rural areas were most likely to involve CBT-skills training and more likely to deliver this intervention than their urban counterparts. The profile of most commonly used interventions remained fairly stable at national, rural and urban levels with relative percentage reductions since July 2010 likely due to an increase in the number of other CBT-based interventions used.

A copayment was charged for only six of the 4,354 Specialist Services sessions where this data was recorded.

In comparison to the sessions delivered via the aggregated national general ATAPS projects,¹⁷ Specialist Services sessions were more likely to be of 30 minutes or less duration, as well as less likely to incur a copayment or to involve psycho-education, CBT-behavioural interventions, CBT-cognitive interventions, CBT-relaxation strategies and interpersonal therapy. Sessions delivered via the Specialist Service were somewhat less likely to involve CBT-skills training than general ATAPS sessions.¹⁷

Table 5: Summary characteristics of sessions provided to consumers through the Specialist Services

	National	Rural	Urban
Duration			
0-30 mins	13.3%	18.7%	10.9%
31-45 mins	1.2%	2.3%	0.7%
46-60 mins	66.8%	64.7%	67.7%
Over 60 mins	18.7%	14.3%	20.7%
Type			
Group	0.6%	0.1%	0.9%
Individual	99.4%	99.9%	99.1%
Copayment			
Yes	0.1%	0%	0.2%
No	99.9%	100%	99.8%
Interventions^a			
Diagnostic assessment	18.2%	6.9%	23.5%
Psycho-education	10.8%	11.7%	10.4%
CBT Behavioural interventions	20.7%	16.3%	22.7%
CBT Cognitive interventions	32.4%	22.9%	36.8%
CBT Relaxation strategies	10.4%	11.7%	9.8%
CBT Skills training	15.6%	27.2%	10.3%
Interpersonal therapy	16.4%	13.9%	17.5%

a. Multiple responses permitted

Chapter 6: What are the consumer outcomes being achieved by the Specialist Services?

In order to assess consumer outcomes for the Specialist Services, projects were advised to use the Modified Scale for Suicidal Ideation (MSSI).²⁷ This measure represents a modified version of the psychometrically validated Scale for Suicidal Ideation (SSI) developed by Beck and colleagues (1979)²⁸, for administration and scoring by clinicians, to increase its utility by allied health professionals and researchers.

The MSSI is comprised of 18 items, 13 from the original SSI and five that are new, the first four of which serve as screening items. Consumers reporting a moderate or strong wish to die (Item 1) or no or weak desire to live (Item 2) or any desire to make an active (Item 3) or passive (Item 4) suicide attempt are considered to have sufficient ideation to merit administration of the entire scale, while consumers who do not meet this criterion are considered to have no suicidal ideation and are not administered the rest of the scale. Each of the 18 items is rated on a four point Likert scale ranging from 0 to 3, which are summed to yield a total score ranging from 0 to 54, with negative items reverse scored so that higher scores indicate higher suicidal ideation. Total scores from 0-8 indicate 'Low Suicidal Ideation', 9-20 indicate 'Mild-Moderate Suicidal Ideation' and 21+ indicate 'Severe Suicidal Ideation'.

The MSSI was selected as the outcome measure of choice on the grounds of: proven psychometric properties; the SSI informing its development; being freely available; its ability to be administered by all allied health professionals, not just psychologists or GPs; its reasonable length; its contents being likely to form part of clinical risk assessment; and its likely sensitivity to detect change given that it assesses suicidal ideation in the previous 48 hours.²⁷

Investigation of all the available outcome data indicated that 234 (19%) consumers had pre- and post-treatment scores on at least one outcome measure, with Table 6 describing the number of outcome measures used to assess each consumer. Of the 234 consumers, 188 had been assessed with the MSSI, 88 with either the Depression, Anxiety and Stress Scales (DASS) 21 or 42 item version, and 77 with the Kessler 10 (K10). Therefore, the DASS and K10 are also described, analysed and reported.

Table 6: Number of outcome measures available for consumers with pre- and post-treatment outcome data

Number of outcome measures	Number of consumers	Percent of consumers
1	144	61.5
2	2	0.9
3	14	6.0
4	34	14.5
5	40	17.1
Total	234	100.0

Both the DASS 21 item and 42 item scales, have three subscales - depression, anxiety, and stress - that are equivalent as the subscales of the 21-item version are simply doubled to be interpreted on the same scale as the 42-item scale.²⁹ Each of the DASS subscales is considered independently as it is not considered clinically meaningful to interpret a total score. The consumer is asked to rate the extent to which each of the statements applies to him- or her-self 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'). A total score for each subscale is derived by summing the individual items comprising the respective subscales, ranging from 0 to 42, with higher scores

indicative of worse symptomatology. Specifically, scores on each of the subscales are classified from normal to extremely severe, with the scores for the various severities shown in Table 7.

Table 7: Score interpretation for each of DASS subscales

Classification	Depression	Anxiety	Stress
Normal	0-9	0-7	0-14
Mild	10-13	8-9	15-18
Moderate	14-20	10-14	19-25
Severe	21-27	15-19	26-33
Extremely severe	28+	20+	34+

The K10 is a 10-item consumer rated measure designed to assess non-specific psychological distress.³⁰ The consumer is asked 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'). The items are summed to produce a total score that ranges from 10 to 50, with higher scores indicative of higher distress.³¹ Specifically, total scores from 10-19 indicate 'Likely to be well', 20-24 'Likely to have a mild disorder', 25-29 'Likely to have a moderate mental disorder', and 30-50 'Likely to have a severe mental disorder'.

Table 8 shows the mean pre-treatment, mean post-treatment and mean difference in pre- and post-treatment scores on the MSSSI, the three DASS subscales and the K10. A positive difference between pre- and post-treatment is indicative of improvements in symptoms on all of the scales. Across all measures, the mean difference was statistically significant and indicative of clinical improvement suggesting that the Specialist Services are achieving positive consumer outcomes.

Table 8: Pre- and post-treatment outcome scores on available outcome measures for patients receiving care through the Specialist Services

Outcome Measure	n	Pre-treatment		Post-treatment		Difference	
		Mean	s.d.	Mean	s.d.	Mean	s.d.
MSSSI	188	11.22	11.11	2.35	4.87	8.87	9.94*
DASS-Anxiety	88	18.33	10.45	9.77	7.70	8.55	9.58*
DASS-Depression	88	27.26	10.54	11.34	9.25	15.92	11.47*
DASS-Stress	85	23.75	11.21	12.72	8.81	11.02	11.02*
K10	77	34.87	7.83	23.07	9.46	11.79	9.88*

N.B. Each of the DASS subscales is completed as one measure and therefore these represent the same consumers on all three subscales.

* p <0.001.

Chapter 7: Discussion and conclusions

Summary of the achievements of the Specialist Services component of the ATAPS projects

The current report considered the achievements of the Specialist Services component of the ATAPS projects since its introduction in 2008. It examined the level of uptake by GPs, emergency departments, allied health professionals and consumers at risk of suicide; the socio-demographic and clinical profile of these consumers; the precise nature of services being delivered; and the consumer outcomes achieved. Specifically, it set out to investigate four evaluation questions, the answers to each of which are summarised below.

Key findings

What is the level of uptake of Specialist Services by GPs, emergency departments, allied health professionals and consumers?

Uptake data was available for 18 (of the 19 funded) Divisions who had entered data into the minimum data set as at 24 January 2011. For the period 1 October 2008 to 24 January 2011, referrals were made by 636 GPs and sessions were conducted by 167 allied health professionals.

Whilst the majority of referrals to the services were made by GPs (79%), 18% were made by emergency departments and 3% were made by community mental health services. The vast majority of the referrals made by emergency departments were in urban areas, with only four such referrals in rural areas. These trends in referral are consistent with the period 1 October 2008 to 28 June 2010 presented in the third interim report of the Specialist Services.²¹

Between 1 October 2008 and 24 January 2011, 1,401 referrals (399 rural and 1,002 urban) were made to the Specialist Services. This represents a 54% increase in referrals since June 2010.²¹

Overall, 6,910 sessions (2,184 rural, 4,726 urban) were delivered via the Specialist Services pilot between 1 October 2008 and 24 January 2011, representing an increase of 2,647 sessions reported since June 2010.²¹ These 6,910 sessions were delivered to 1,247 (or 90% of the referred) consumers, making the average number of sessions provided to consumers 5.5, which represents a slight increase in the average number of sessions delivered as at June 2010.²¹

Overall, there were a greater proportion of referrals (72%) and sessions (68%) in urban compared to rural areas. Since starting to rise in late 2008, the number of sessions and referrals in urban and rural areas appears to have reached a level of relative stability with some fluctuation. Greater variability in the rate of referrals and sessions were observed in rural areas than in urban areas, with the decline nationally in the last quarter likely to be attributable to data entry lags.

What is the socio-demographic and clinical profile of consumers accessing Specialist Services?

Around three-fifths of consumers of Specialist Services were female, and their mean age was approximately 32 years. Over half were on low incomes, as judged by their GP. About two fifths of the consumers had not previously accessed mental health care. Less than 2% of consumers were reported to be Aboriginal, and less than 1% Torres Strait Islander. A diagnosis was made by the referring GP (or in a minority of instances other professional) for 71% (n = 998) of the 1,401 referrals made. For these 998 referrals, the vast majority had been diagnosed with depression (89%). In the main, the profiles of rural and urban consumers were

similar. However, there was a trend for rural consumers to be somewhat: more likely to be male, younger, and Aboriginal, and less likely to have an alcohol and drug use disorder, or a psychotic or anxiety disorder than urban consumers. The profile of Specialist Services' consumers differed from that of the general ATAPS projects' consumers.

What is the precise nature of the care being delivered via the Specialist Services?

Sessions of 46-60 minutes accounted for two thirds of Specialist Services. More sessions conducted via the Specialist Services were less than 30 minutes when compared with the national general ATAPS services. Session interventions differed between urban and rural areas and from the national general ATAPS projects. Overall and in urban areas, these sessions were more likely to involve diagnostic assessment, CBT-cognitive interventions, and CBT-behavioural interventions. However, sessions in rural areas were most likely to involve CBT-skills training and to deliver this intervention than their urban counterparts. Copayment was only reported in a very small minority of the Specialist Services sessions.

What are the consumer outcomes being achieved by the Specialist Services?

Investigation of all the available outcome data indicated that 234 (19%) consumers had pre and post scores on at least one outcome measure. Of the 234 consumers, 188 had been assessed with the MSSSI, 88 with the DASS, and 77 with the K10. The Specialist Services pilot is achieving positive outcomes for consumers as evidenced by statistically and clinically significant levels of improvement across all outcome measures examined.

Caveat

Some caution should be exercised in interpreting the above findings because there are often lags in data entry which are attributable to some Divisions not entering session data into the minimum dataset until treatment has been completed for a given consumer. This is likely to have the greatest impact on recent data.

Conclusions

This caveat aside, the current report confirms the status of the Specialist Services as a valuable and complementary sub-program of the general ATAPS projects. The Specialist Services have continued to attract referrals from GPs and emergency departments. Correspondingly, allied health professionals have delivered increasing numbers of sessions to a significant number of consumers. The profile of consumers continues to be fairly consistent over time and somewhat different from the general ATAPS projects suggesting that these Specialist Services are reaching a different group of consumers who are more likely to be younger, males and to have a diagnosis of depression. The nature of services being delivered remains at a point of relative consistency, which varies from that of general ATAPS and between rural and urban areas. The vast majority of consumers are receiving a free of cost service. There is good evidence that the pilot is achieving positive outcomes for consumers in terms of alleviating symptoms and improving levels of functioning.

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Appendix A: Divisions of General Practice involved in the Specialist Services

Division	State	Urban/Rural
NSW Central West DGP	NSW	Rural
GP Access	NSW	Urban
NSW Central Coast DGP	NSW	Urban
Central Sydney GP Network	NSW	Urban
Dandenong Casey GP Association	VIC	Urban
Peninsula GP Network	VIC	Rural
Otway DGP	VIC	Urban
Logan Area DGP	QLD	Urban
Gold Coast DGP	QLD	Urban
Sunshine Coast DGP	QLD	Rural
RHealth (Southern QLD Rural)	QLD	Rural
Adelaide Northern DGP	SA	Urban
Adelaide Hills DGP (SAH)	SA	Rural
Flinders and Far North DGP	SA	Rural
Canning DGP	WA	Urban
Rockingham Kwinana DGP	WA	Urban
General Practice Network NT	NT	Rural
GPSouth – Tasmania -Southern Region	TAS	Urban
DGP Northern Tasmania ^a	TAS	Rural

a. DGP Northern Tasmania ceased participating in the pilot as at 30 June 2009.

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