

# CHAPTER 9: IMPACT ON RELATED PROGRAMS

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## 9.1 OVERVIEW

This chapter presents findings relating to ***Evaluation Question 7 which asks: To what extent has the Better Access initiative impacted on related MBS services?*** Specifically, Division-level analyses were conducted in which provision of non-*Better Access* mental health MBS services was examined over time in order to determine demand for these services had changed since the introduction of *Better Access*. These analyses explored the impact of *Better Access* uptake on non-*Better Access* mental health MBS services uptake in the period after the introduction of *Better Access*. Similar analyses using Division level data were also undertaken looking at uptake of psychological services under the Access to Allied Psychological Services projects.

The following series of research questions was examined separately for the two program areas:

### A. *Non-Better Access mental health MBS items*

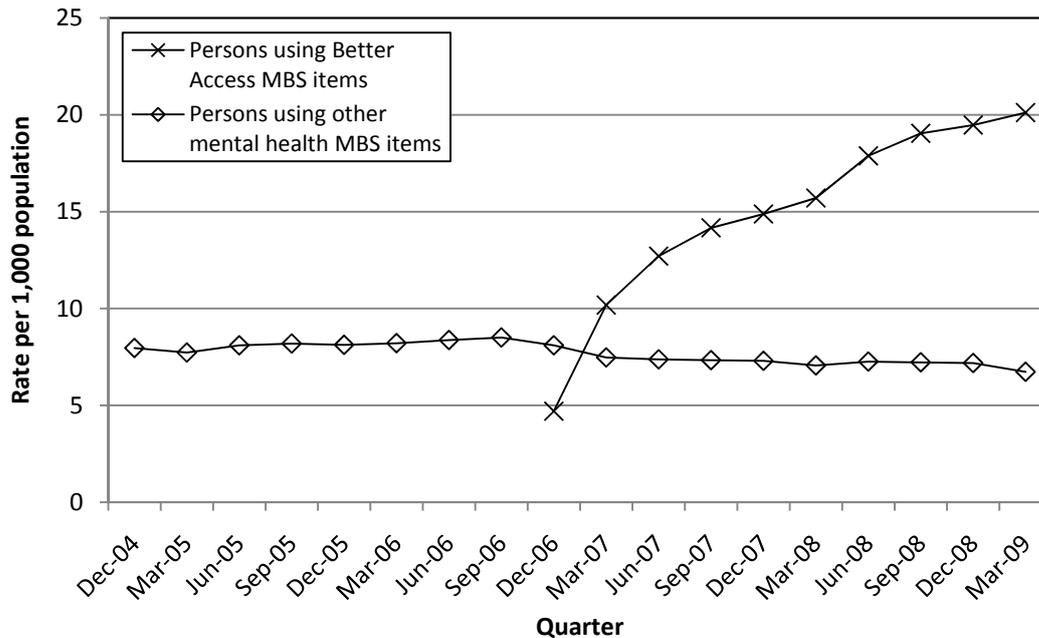
1. Has there been a reduction in demand for non-*Better Access* mental health MBS services since the introduction of *Better Access*?
2. Do patterns of demand for non-*Better Access* mental health MBS services differ between metropolitan and rural or remote regions?
3. What is the relationship between *Better Access* uptake and demand for non-*Better Access* mental health MBS services at a Division level?
4. Does the relationship between *Better Access* uptake and demand for non-*Better Access* mental health MBS services at a Division level differ between metropolitan and rural or remote regions?

### B. *Psychological services provided under the Access to Allied Psychological Services projects*

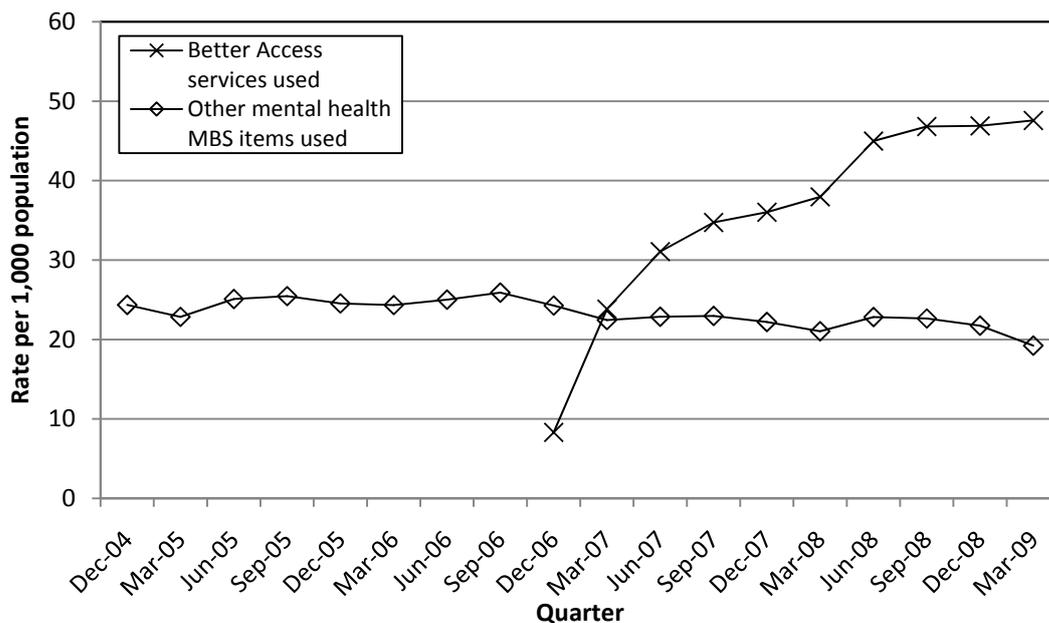
5. Has there been a reduction in demand for ATAPS psychological services since the introduction of *Better Access*?
6. Do patterns of demand for ATAPS psychological services differ between metropolitan and rural or remote regions?
7. What is the relationship between *Better Access* uptake and demand for ATAPS psychological services at a Division level?
8. Does the relationship between *Better Access* uptake and demand for ATAPS psychological services at a Division level differ between metropolitan and rural or remote regions?

## 9.2 HAS THERE BEEN A REDUCTION IN DEMAND FOR NON-BETTER ACCESS MENTAL HEALTH MBS SERVICES SINCE THE INTRODUCTION OF BETTER ACCESS?

Figures 9.1 and 9.2 show the rates of uptake of *Better Access* and non-*Better Access* MBS items from the December 2004 quarter (i.e. 2 years prior to the commencement of *Better Access*) to the March 2009 quarter across all 113 Divisions of General Practice, for persons and services respectively.



**Fig 9.1** Persons using *Better Access* and other mental health MBS items, December 2004 quarter to March 2009 quarter (rate per 1,000 population), for 113 Divisions of General Practice



**Fig 9.2** *Better Access* and other mental health MBS services used, December 2004 quarter to March 2009 quarter (rate per 1,000 population), for 113 Divisions of General Practice

The rate of persons using non-*Better Access* mental health MBS items was 8.0 per 1,000 total population in the December 2004 quarter and 6.8 per 1,000 in the March 2009 quarter. The rate of non-*Better Access* mental health items used was 24.3 per 1,000 total population in the December 2004 quarter and 19.2 per 1,000 in the March 2009 quarter.

To examine whether the patterns of uptake of non-*Better Access* mental health MBS items had changed since *Better Access* was introduced, the trend for the pre-*Better Access* period (December 2004 quarter to September 2006) was compared to the trend for the post-*Better Access* period (March 2007 quarter to the March 2009 quarter). Analyses found that rates of persons using non-*Better Access* mental health MBS items, and services used, were stable in the pre- and post-*Better Access* periods. There was no significant change in trend for either persons using services, or total services used (see Table 9.1).

**Table 9.1** Estimated change in trends for uptake of MBS-subsidised non-*Better Access* mental health services, before and after the introduction of *Better Access*

	Trend pre- <i>Better Access</i>		Trend post- <i>Better Access</i>		Ratio of trends <sup>a</sup>	
	RR (95% CI)	P	RR (95% CI)	P	RR (95% CI)	P
Persons using services	1.008 (0.989-1.026)	0.417	0.989 (0.973-1.005)	0.188	0.982 (0.958-1.006)	0.141
Services used	1.006 (0.983-1.029)	0.615	0.986 (0.967-1.005)	0.151	0.980 (0.951-1.010)	0.189

Data have regard to all claims processed up to and including 30 April 2009.

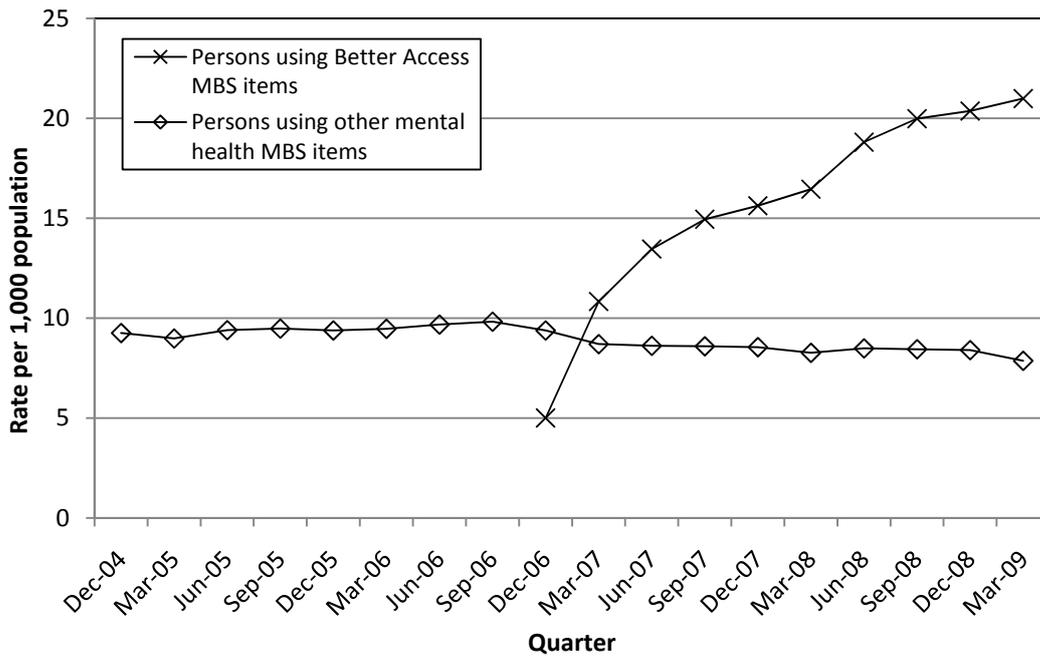
RR, rate ratio; CI, confidence interval. Data exclude the December 2006 quarter.

<sup>a</sup> The ratio of the post-*Better Access* trend to the pre-*Better Access* trend.

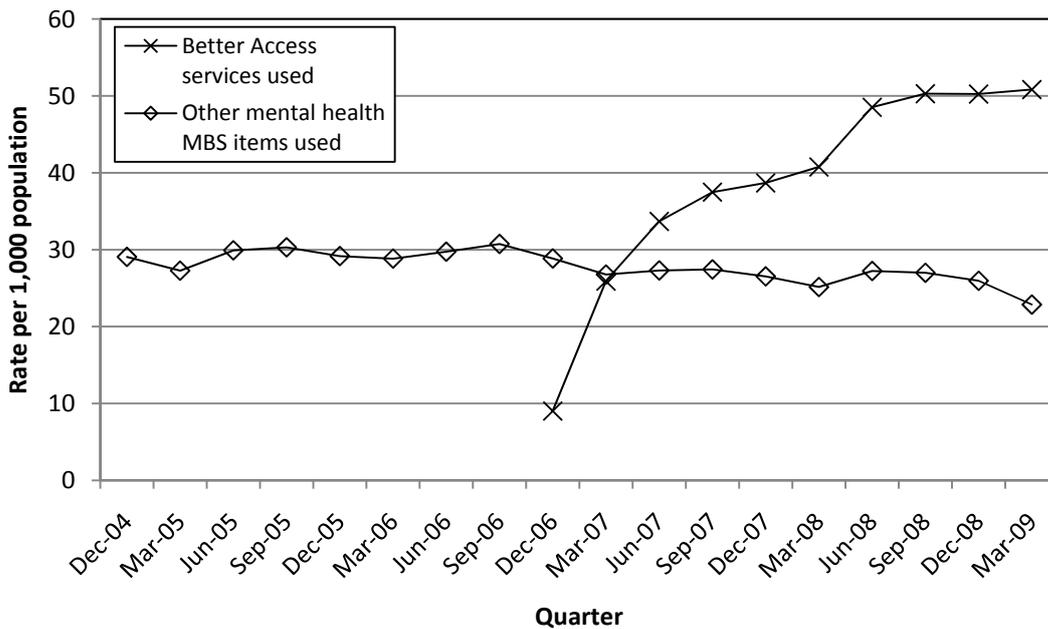
### 9.3 DO PATTERNS OF DEMAND FOR NON-*BETTER ACCESS* MENTAL HEALTH MBS SERVICES DIFFER BETWEEN METROPOLITAN AND RURAL OR REMOTE REGIONS?

Trends in uptake of non-*Better Access* mental health MBS items for metropolitan and rural or remote regions were examined separately. Because Divisions may encompass areas with varying levels of urbanicity or remoteness, areas classified as Metro or Metro/Rural were deemed metropolitan, using the classification developed by the Primary Health Care Research and Information Service<sup>25</sup> (see section 2.2.3 for further information). All other Divisions were deemed rural or remote.

Figures 9.3 and 9.4 show the rates of uptake of *Better Access* and non-*Better Access* MBS items from the December 2004 quarter (i.e. 2 years prior to the commencement of *Better Access*) to the March 2009 quarter for metropolitan Divisions, for persons and services, respectively.



**Fig 9.3** Persons using *Better Access* and non-*Better Access* MBS items, December 2004 quarter to March 2009 quarter (rate per 1,000 population), metropolitan Divisions



**Fig 9.4** *Better Access* and non-*Better Access* MBS services used, December 2004 quarter to March 2009 quarter (rate per 1,000 population), metropolitan Divisions

The rate of persons using non-*Better Access* services in metropolitan Divisions ranged from 9.3 per 1,000 total population in the December 2004 quarter to 7.9 per 1,000 in the March 2009 quarter. The rate of non-*Better Access* services used ranged from 29.1 per 1,000 total population in the December 2004 quarter to 22.9 per 1,000 in the March 2009 quarter.

Analyses were undertaken to examine whether the patterns of uptake of non-*Better Access* mental health services in metropolitan Divisions had changed since *Better Access* was introduced. The trend for the pre-*Better Access* period (December 2004 quarter to September

2006) was compared to the trend for the post-*Better Access* period (March 2007 quarter to the March 2009 quarter). Trends were stable in both periods. There was no significant change in trend for either persons using services, or total services used (see Table 9.2).

**Table 9.2** Estimated change in trends for uptake of MBS-subsidised non-*Better Access* mental health services, before and after the introduction of *Better Access*, metropolitan Divisions

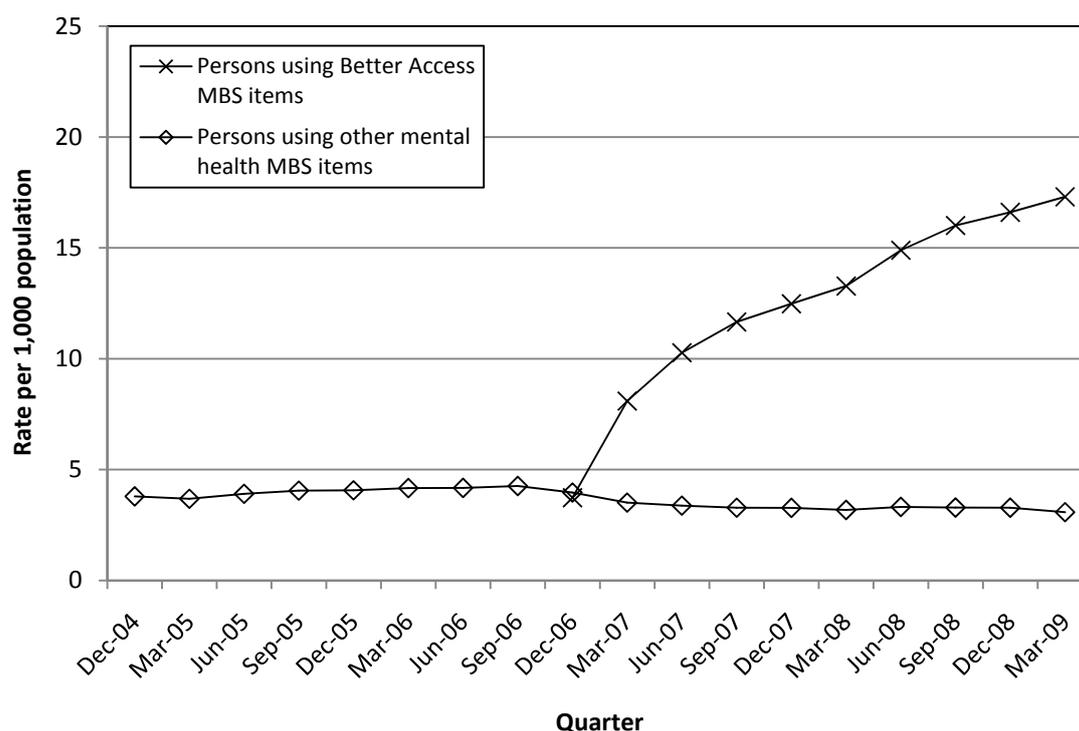
	Trend pre- <i>Better Access</i>		Trend post- <i>Better Access</i>		Ratio of trends <sup>a</sup>	
	RR (95% CI)	P	RR (95% CI)	P	RR (95% CI)	P
Persons using services	1.005 (0.990-1.021)	0.506	0.988 (0.975-1.002)	0.100	0.983 (0.963-1.004)	0.115
Services used	1.004 (0.983-1.026)	0.695	0.984 (0.967-1.003)	0.092	0.980 (0.953-1.008)	0.164

Data have regard to all claims processed up to and including 30 April 2009.

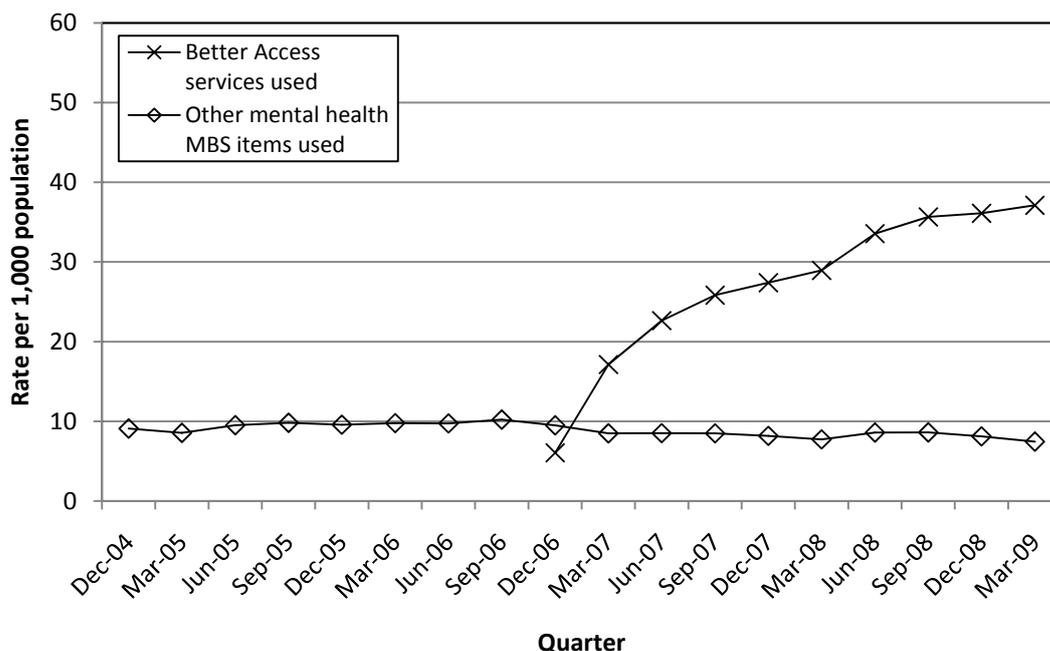
RR, rate ratio; CI, confidence interval. Data exclude the December 2006 quarter.

<sup>a</sup> The ratio of the post-*Better Access* trend to the pre-*Better Access* trend.

Figures 9.5 and 9.6 show the rates of uptake of *Better Access* and non-*Better Access* MBS items from the December 2004 quarter (i.e. 2 years prior to the commencement of *Better Access*) to the March 2009 quarter for rural and remote Divisions.



**Fig 9.5** Persons using *Better Access* and non-*Better Access* MBS items, December 2004 quarter to March 2009 quarter (rate per 1,000 population), rural and remote Divisions



**Fig 9.6** *Better Access* and non-*Better Access* MBS services used, December 2004 quarter to March 2009 quarter (rate per 1,000 population), rural and remote Divisions

The rate of persons using non-*Better Access* services in rural and remote Divisions ranged from from 3.8 per 1,000 total population in the December 2004 quarter to 3.1 per 1,000 in the March 2009 quarter. The rate of non-*Better Access* services used ranged from 9.1 per 1,000 total population in the December 2004 quarter to 7.4 per 1,000 in the March 2009 quarter.

Analyses were then undertaken to examine whether the patterns of uptake of non-*Better Access* mental health services in rural and remote Divisions had changed since *Better Access* was introduced. The trend for the pre-*Better Access* period (December 2004 quarter to September 2006) was compared to the trend for the post-*Better Access* period (March 2007 quarter to the March 2009 quarter). There was no significant change in trend for either persons using services, or total services used (see Table 9.3).

**Table 9.3** Estimated change in trends for uptake of MBS-subsidised non-*Better Access* mental health services, before and after the introduction of *Better Access*, rural and remote Divisions

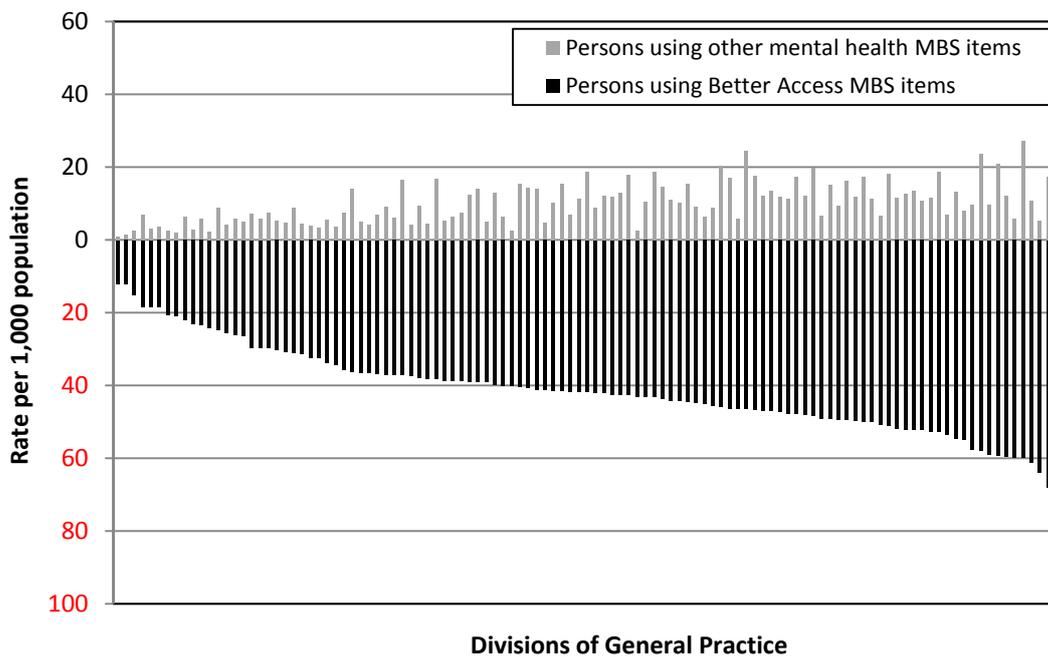
	Trend pre- <i>Better Access</i>		Trend post- <i>Better Access</i>		Ratio of trends <sup>a</sup>	
	RR (95% CI)	P	RR (95% CI)	P	RR (95% CI)	P
Persons using services	1.015 (0.992-1.038)	0.206	0.991 (0.971-1.012)	0.402	0.977 (0.947-1.007)	0.137
Services used	1.013 (0.988-1.038)	0.307	0.992 (0.970-1.013)	0.444	0.979 (0.947-1.012)	0.205

Data have regard to all claims processed up to and including 30 April 2009.

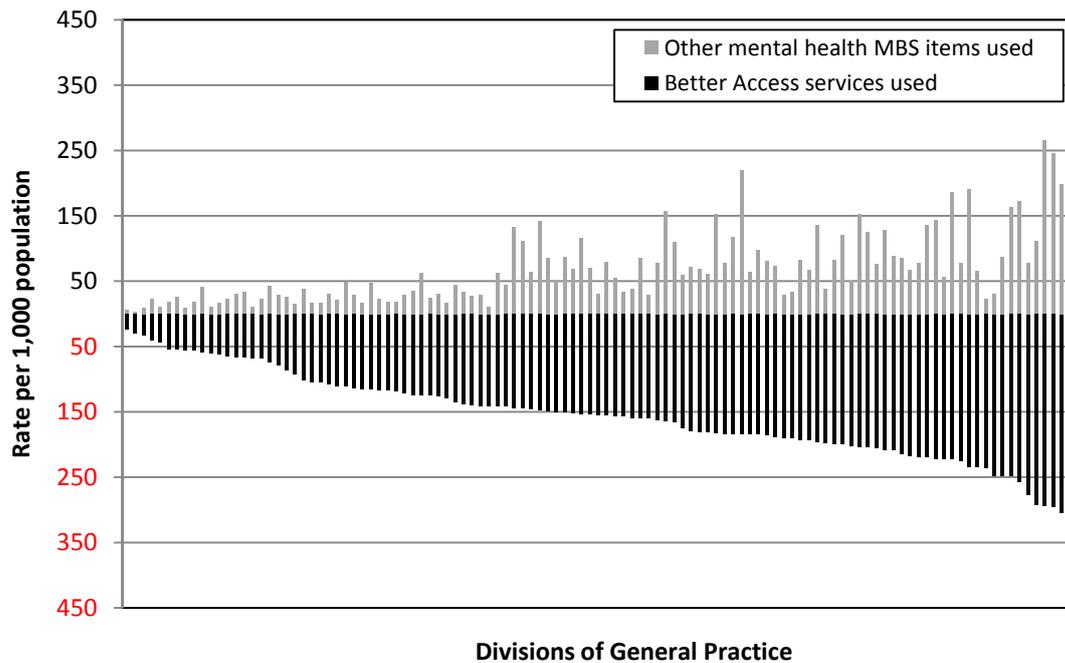
<sup>a</sup> The ratio of the post-*Better Access* trend to the pre-*Better Access* trend.

#### 9.4 WHAT IS THE RELATIONSHIP BETWEEN *BETTER ACCESS* UPTAKE AND DEMAND FOR NON-*BETTER ACCESS* MENTAL HEALTH MBS SERVICES AT A DIVISION LEVEL?

To examine the relationship between *Better Access* uptake and the use of non-*Better Access* mental health MBS items, analyses focused on the period since the introduction of *Better Access*. Specifically, analyses were restricted to 2008 data (the most recent data available for non-*Better Access* mental health MBS items), as these were considered more likely to be representative of established service use patterns. Figures 9.7 and 9.8 show the patterns of uptake of *Better Access* and non-*Better Access* MBS items across all 113 Divisions of General Practice, for persons and services, respectively.



**Fig 9.7** *Persons using Better Access and non-Better Access MBS items, 2008 (rate per 1,000 population), across 113 Divisions of General Practice*



**Fig 9.8** Total *Better Access* and non-*Better Access* MBS items used, 2008 (rate per 1,000 population), across 113 Divisions of General Practice

Table 9.4 shows the summary statistics for non-*Better Access* mental health MBS items and *Better Access* uptake for the 113 Divisions of General Practice in Australia in 2008. The mean rate of persons using non-*Better Access* mental health MBS items per Division was 10.2 per 1,000 total population, with a range of 0.9 to 30.5 per 1,000. This is, on average, around one-quarter the rate of persons using *Better Access* items (mean per Division of 41.3 per 1,000 total population). The mean rate of non-*Better Access* mental health MBS items used per Division was 70.3 per 1,000 total population, with a range of 2.7 to 317.7 per 1,000. This is, on average, around half the rate of persons using *Better Access* items (mean per Division of 156.5 per 1,000 total population).

**Table 9.4** Summary statistics for non-*Better Access* mental health MBS items and *Better Access* uptake in 113 Divisions of General Practice in Australia, 2008

Division level measures	Summary statistics		
	Range	Mean	SD
Persons using non- <i>Better Access</i> mental health MBS items (per 1,000)	0.9-30.5	10.2	5.9
Non- <i>Better Access</i> mental health MBS items used (per 1,000)	2.7-317.7	70.3	59.4
<i>Better Access</i> users (per 1,000)	12.1-75.7	41.3	11.9
<i>Better Access</i> services used (per 1,000)	23.6-398.1	156.5	67.9

Data have regard to all claims processed up to and including 30 April 2009.

SD, standard deviation.

The relationship between the uptake of non-*Better Access* mental health MBS items and *Better Access* items using negative binomial regression analyses (see Chapter 2 for further information) was examined in order to quantify the effect of *Better Access* uptake on non-*Better Access* item uptake within Divisions. The first model used total persons using non-*Better Access* MBS mental health items in the Division as the dependent variable, and adjusted for the size of the population in each stratum of the dataset by incorporating the logarithm of the population size

as an offset term. The main predictor was the rate of *Better Access* users (per 1,000) in the Division. The second model used total non-*Better Access* MBS mental health services in the Division as the dependent variable, and adjusted for the size of the population in each stratum of the dataset by incorporating the logarithm of the population size as an offset term. The main predictor was the rate of *Better Access* services used (per 1,000) in the Division. Consideration was given to controlling for GP supply in each Division, using the proportion of full-time weighted equivalent GPs in the Division (GP FWE). However, the relatively high correlation between GP FWE and *Better Access* population uptake rate ( $r = 0.580$ ;  $P < 0.001$ ) precluded this.

Tables 9.5 and 9.6 present the results of the regression analyses. These show that Divisions with relatively higher rates of persons using *Better Access* items also have relatively higher rates of persons using non-*Better Access* mental health MBS items (Table 9.5). The same was true for the relationship between *Better Access* and non-*Better Access* services used (Table 9.6).

**Table 9.5** Negative binomial regression estimates of rate ratios with 95% CIs for persons using any non-*Better Access* mental health MBS item, 2008

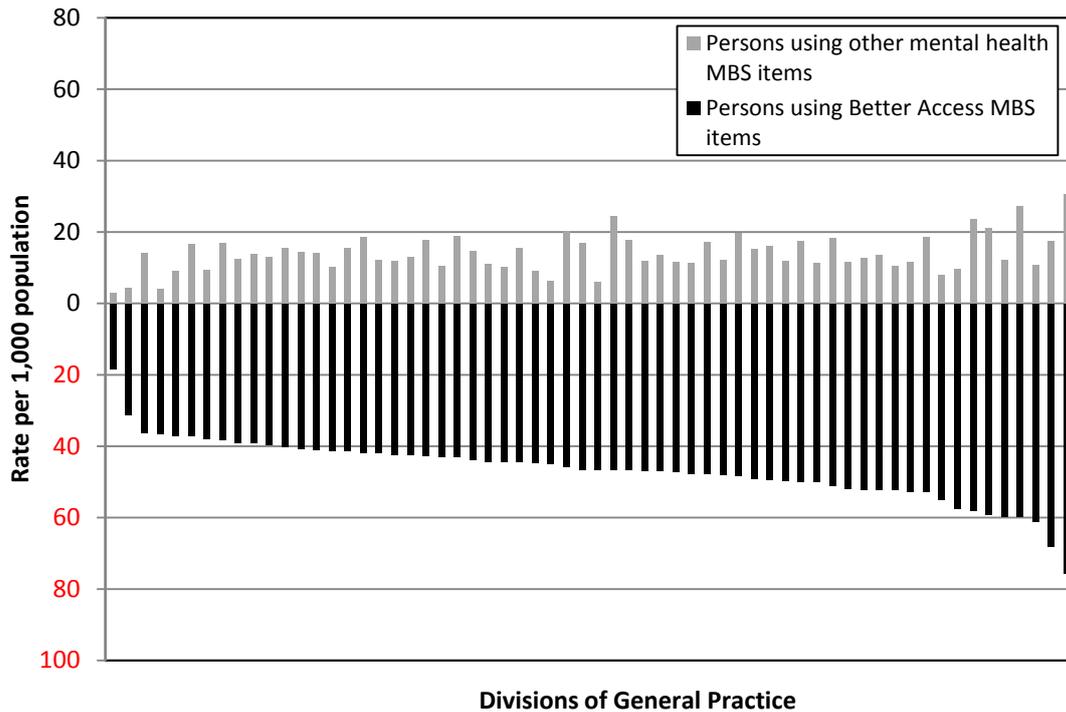
	Rate ratio	95% CI	P
<i>Better Access</i> users (per 1,000) in Division	1.039	1.030-1.047	<0.001

**Table 9.6** Negative binomial regression estimates of rate ratios with 95% CIs for total non-*Better Access* mental health MBS items used, 2008

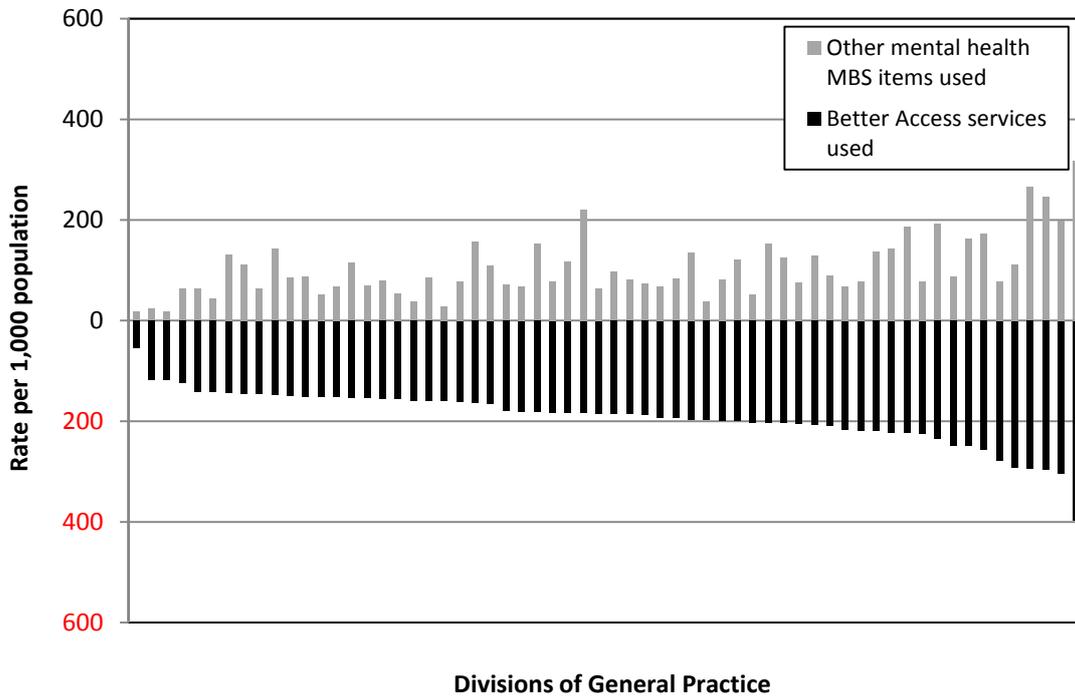
	Rate ratio	95% CI	P
<i>Better Access</i> services used (per 1,000) in Division	1.010	1.009-1.012	<0.001

## 9.5 DOES THE RELATIONSHIP BETWEEN *BETTER ACCESS* UPTAKE AND DEMAND FOR NON-*BETTER ACCESS* MENTAL HEALTH MBS SERVICES AT A DIVISION LEVEL DIFFER BETWEEN METROPOLITAN AND RURAL OR REMOTE REGIONS?

Analyses were then undertaken to examine whether the impact *Better Access* uptake on non-*Better Access* mental health MBS items differed between metropolitan and rural or remote areas. Figures 9.9 and 9.10 show the patterns of uptake of *Better Access* and non-*Better Access* MBS items across all metropolitan Divisions of General Practice.



**Fig 9.9** *Persons using Better Access and non-Better Access MBS items, 2008 (rate per 1,000 population), metropolitan Divisions of General Practice*



**Fig 9.10** *Total Better Access and non-Better Access MBS items used, 2008 (rate per 1,000 population), metropolitan Divisions of General Practice*

Table 9.7 shows the summary statistics for non-Better Access mental health MBS items, separately for Divisions classified as metropolitan and rural or remote, and Better Access uptake in 2008.

**Table 9.7** Summary statistics for non-*Better Access* mental health MBS items, separately for metropolitan and rural/remote Divisions, and *Better Access* uptake, 2008

Division level measures	Summary statistics		
	Range	Mean	SD
<b>Metropolitan Divisions</b>			
Persons using non- <i>Better Access</i> mental health MBS items (per 1,000)	3.0-30.5	14.0	5.2
Non- <i>Better Access</i> mental health MBS items used (per 1,000)	17.8-317.7	104.3	60.3
<i>Better Access</i> users (per 1,000)	18.4-75.7	46.7	8.7
<i>Better Access</i> services used (per 1,000)	54.7-398.1	191.9	54.2
<b>Rural or remote Divisions</b>			
Persons using non- <i>Better Access</i> mental health MBS items (per 1,000)	0.9-13.3	5.7	2.5
Non- <i>Better Access</i> mental health MBS items used (per 1,000)	2.7-85.5	28.9	16.6
<i>Better Access</i> users (per 1,000)	12.1-64.0	35.0	12.1
<i>Better Access</i> services used (per 1,000)	23.6-248.0	113.9	57.2

Data have regard to all claims processed up to and including 30 April 2009.

SD, standard deviation.

Tables 9.8 and 9.9 present the results of the regression analyses for metropolitan regions. These show that metropolitan Divisions with relatively higher rates of persons using *Better Access* items also have relatively higher rates of persons using non-*Better Access* mental health MBS items (Table 9.8). The same was true for the relationship between *Better Access* and non-*Better Access* services used (Table 9.9).

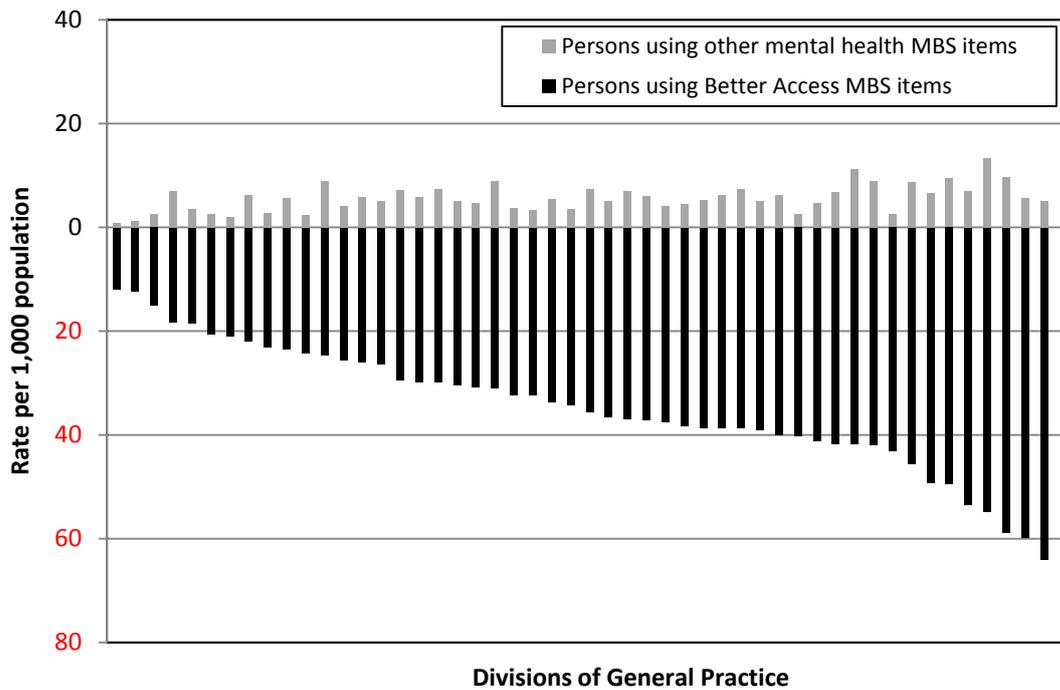
**Table 9.8** Negative binomial regression estimates of rate ratios with 95% CIs for persons using any non-*Better Access* mental health MBS item, 2008, metropolitan regions

	Rate ratio	95% CI	P
<i>Better Access</i> users (per 1,000) in Division	1.022	1.012-1.033	<0.001

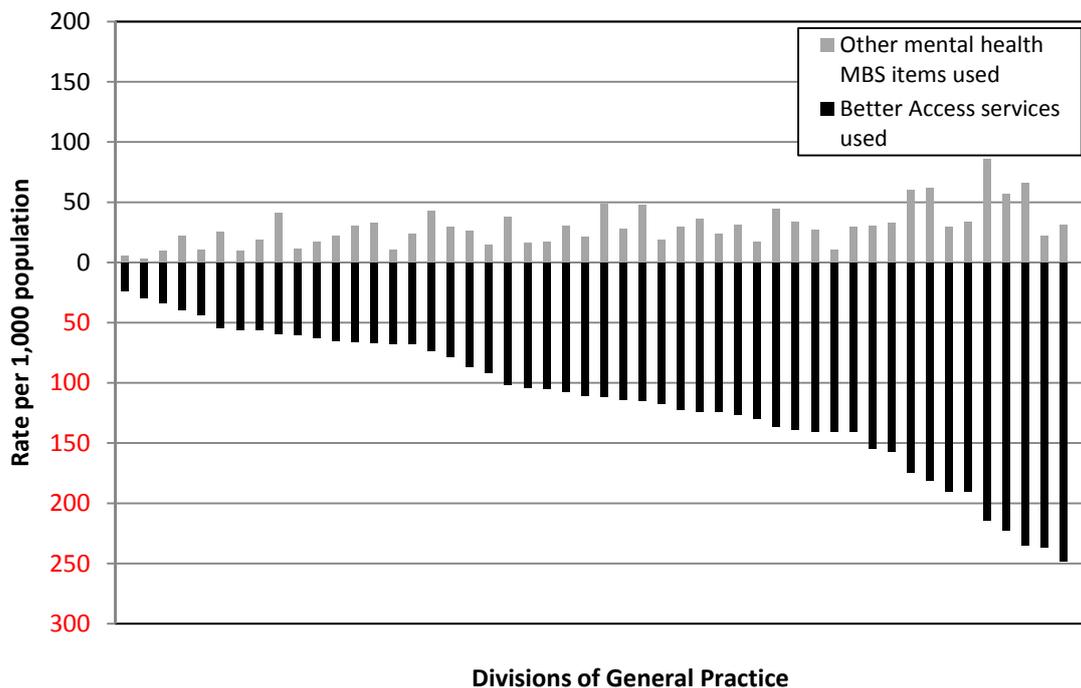
**Table 9.9** Negative binomial regression estimates of rate ratios with 95% CIs for total non-*Better Access* mental health MBS items used, 2008, metropolitan regions

	Rate ratio	95% CI	P
<i>Better Access</i> services used (per 1,000) in Division	1.007	1.005-1.009	<0.001

Patterns in rural and remote regions were then considered. Figures 9.11 and 9.12 show the patterns of uptake of *Better Access* and non-*Better Access* MBS items across all rural and remote Divisions of General Practice.



**Fig 9.11** Persons using Better Access and non-Better Access MBS items, 2008 (rate per 1,000 population), rural and remote Divisions of General Practice



**Fig 9.12** Total Better Access and non-Better Access MBS items used, 2008 (rate per 1,000 population), rural and remote Divisions of General Practice

Tables 9.10 and 9.11 present the results of the regression analyses for metropolitan regions. Almost identical results were found for rural and remote Divisions as for metropolitan Divisions. Rural and remote Divisions with relatively higher rates of persons using *Better Access* items also have relatively higher rates of persons using non-*Better Access* mental health MBS items (Table

9.10). The same was true for the relationship between *Better Access* and non-*Better Access* services used (Table 9.11).

**Table 9.10** Negative binomial regression estimates of rate ratios with 95% CIs for persons using any non-*Better Access* mental health MBS item, 2008, rural and remote regions

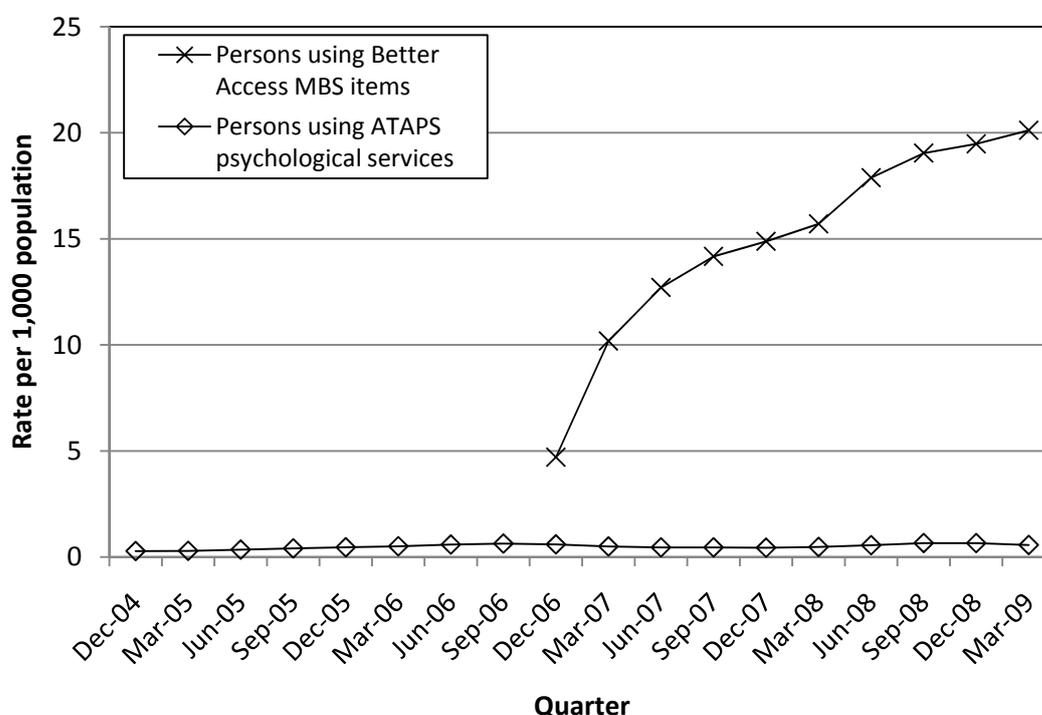
	Rate ratio	95% CI	P
<i>Better Access</i> users (per 1,000) in Division	1.022	1.012-1.032	<0.001

**Table 9.11** Negative binomial regression estimates of rate ratios with 95% CIs for total non-*Better Access* mental health MBS items used, 2008, rural and remote regions

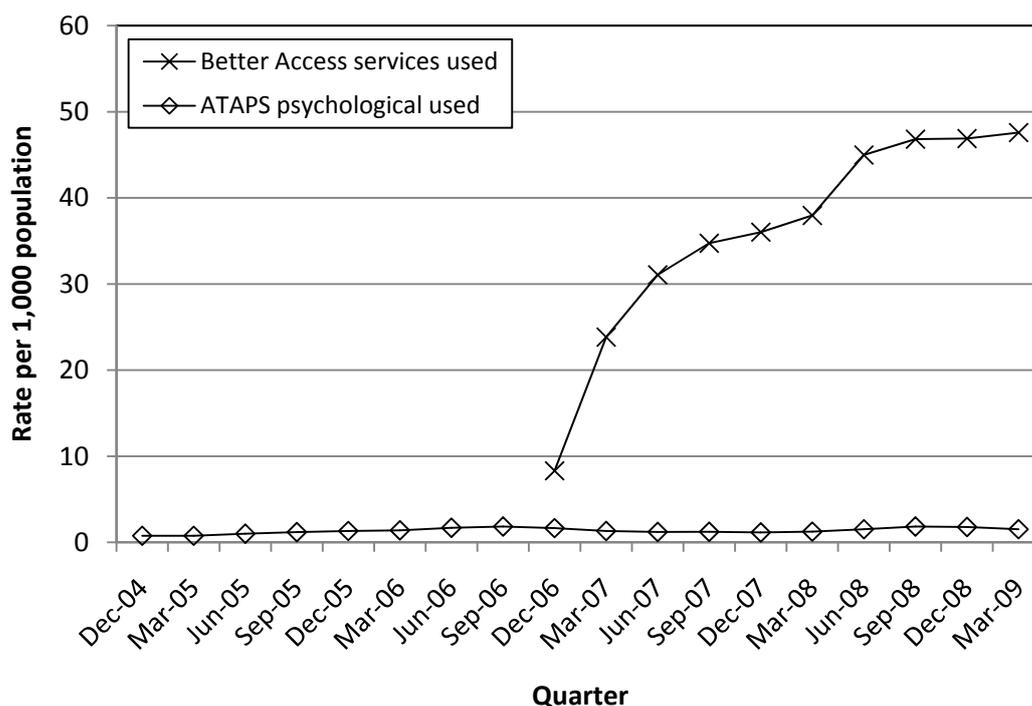
	Rate ratio	95% CI	P
<i>Better Access</i> services used (per 1,000) in Division	1.006	1.004-1.009	<0.001

## 9.6 HAS THERE BEEN A REDUCTION IN DEMAND FOR ATAPS PSYCHOLOGICAL SERVICES SINCE THE INTRODUCTION OF *BETTER ACCESS*?

The next series of analyses considered the impact of *Better Access* on psychological services delivered under the Access to Allied Psychological Services (ATAPS) projects. Figures 9.13 and 9.14 show the rates of uptake of *Better Access* and non-*Better Access* MBS items from the December 2004 quarter (i.e. 2 years prior to the commencement of *Better Access*) to the March 2009 quarter across all 113 Divisions of General Practice, for persons and services respectively.



**Fig 9.13** Persons using *Better Access* and ATAPS, December 2004 quarter to March 2009 quarter (rate per 1,000 population), for 113 Divisions of General Practice



**Fig 9.14** *Better Access* items used and ATAPS sessions delivered, December 2004 quarter to March 2009 quarter (rate per 1,000 population), for 113 Divisions of General Practice

The rate of persons using ATAPS ranged from 0.28 per 1,000 total population in the December 2004 quarter to 0.56 per 1,000 in the March 2009 quarter. The rate of ATAPS sessions delivered ranged from 0.78 per 1,000 total population in the December 2004 quarter to 1.53 per 1,000 in the March 2009 quarter.

Analyses examined whether the patterns of uptake of ATAPS had changed since *Better Access* was introduced. The trend for the pre-*Better Access* period (December 2004 quarter to September 2006) was compared to the trend for the post-*Better Access* period (March 2007 quarter to the March 2009 quarter). Rates continued to grow in the post-*Better Access* period, although the rate of growth was significantly slower than in the pre-*Better Access* period (see Table 9.12).

**Table 9.12** Estimated change in trends for uptake of ATAPS, before and after the introduction of *Better Access*

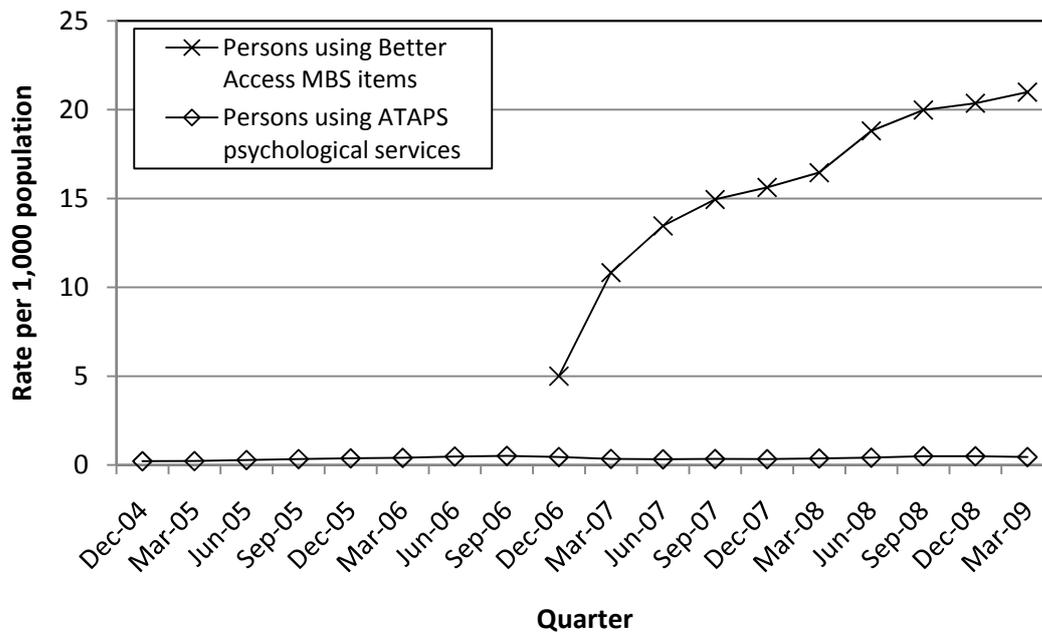
	Trend pre- <i>Better Access</i>		Trend post- <i>Better Access</i>		Ratio of trends <sup>a</sup>	
	RR (95% CI)	P	RR (95% CI)	P	RR (95% CI)	P
Persons using services	1.139 (1.108-1.172)	<0.001	1.036 (1.010-1.063)	0.007	0.909 (0.875-0.945)	<0.001
Services used	1.145 (1.114-1.177)	<0.001	1.038 (1.013-1.064)	0.003	0.907 (0.873-0.941)	<0.001

Data have regard to all claims processed up to and including 30 April 2009.

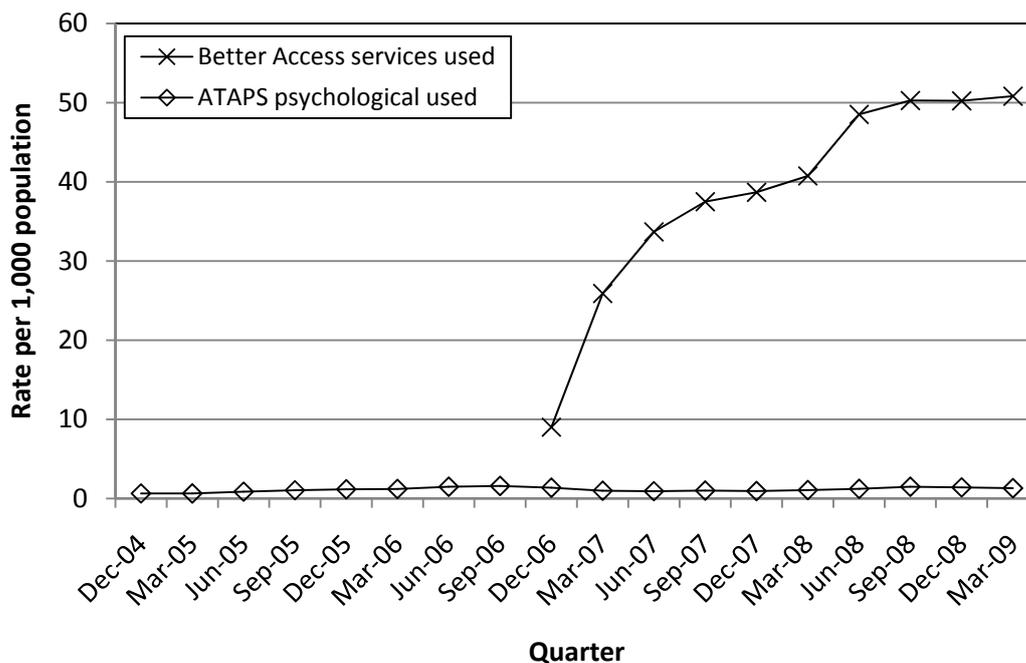
<sup>a</sup> The ratio of the post-*Better Access* trend to the pre-*Better Access* trend.

## 9.7 DO PATTERNS OF DEMAND FOR ATAPS PSYCHOLOGICAL SERVICES DIFFER BETWEEN METROPOLITAN AND RURAL OR REMOTE REGIONS?

Figures 9.15 and 9.16 show the rates of uptake of *Better Access* and ATAPS from the December 2004 quarter (i.e. 2 years prior to the commencement of *Better Access*) to the March 2009 quarter for metropolitan Divisions., for persons and services respectively.



**Fig 9.15** Persons using *Better Access* and ATAPS, December 2004 quarter to March 2009 quarter (rate per 1,000 population), metropolitan Divisions



**Fig 9.16** *Better Access* items and ATAPS sessions delivered, December 2004 quarter to March 2009 quarter (rate per 1,000 population), metropolitan Divisions

The rate of persons using ATAPS psychological services in metropolitan Divisions ranged from 0.21 per 1,000 total population in the December 2004 quarter to 0.45 per 1,000 in the March 2009 quarter. The rate of ATAPS psychological services used ranged from 0.65 per 1,000 total population in the December 2004 quarter to 1.30 per 1,000 in the March 2009 quarter.

Analyses examined whether the patterns of uptake of ATAPS psychological services in metropolitan Divisions had changed since *Better Access* was introduced. The trend for the pre-*Better Access* period (December 2004 quarter to September 2006) was compared to the trend for the post-*Better Access* period (March 2007 quarter to the March 2009 quarter). Rates continued to grow in the post-*Better Access* period, although the rate of growth was significantly slower than in the pre-*Better Access* period (see Table 9.13).

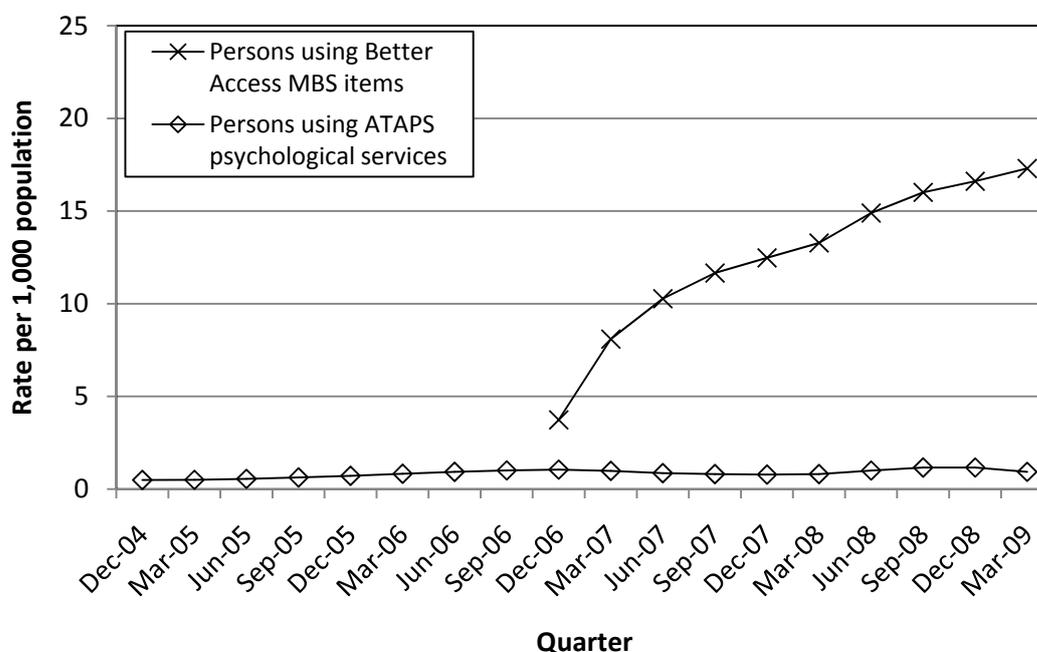
**Table 9.13** Estimated change in trends for uptake of ATAPS, before and after the introduction of *Better Access*, metropolitan Divisions

	Trend pre- <i>Better Access</i>		Trend post- <i>Better Access</i>		Ratio of trends <sup>a</sup>	
	RR (95% CI)	P	RR (95% CI)	P	RR (95% CI)	P
Persons using services	1.145 (1.106-1.187)	<0.001	1.039 (1.007-1.072)	0.016	0.907 (0.865-0.952)	<0.001
Services used	1.148 (1.108-1.190)	<0.001	1.043 (1.010-1.077)	0.010	0.908 (0.865-0.953)	<0.001

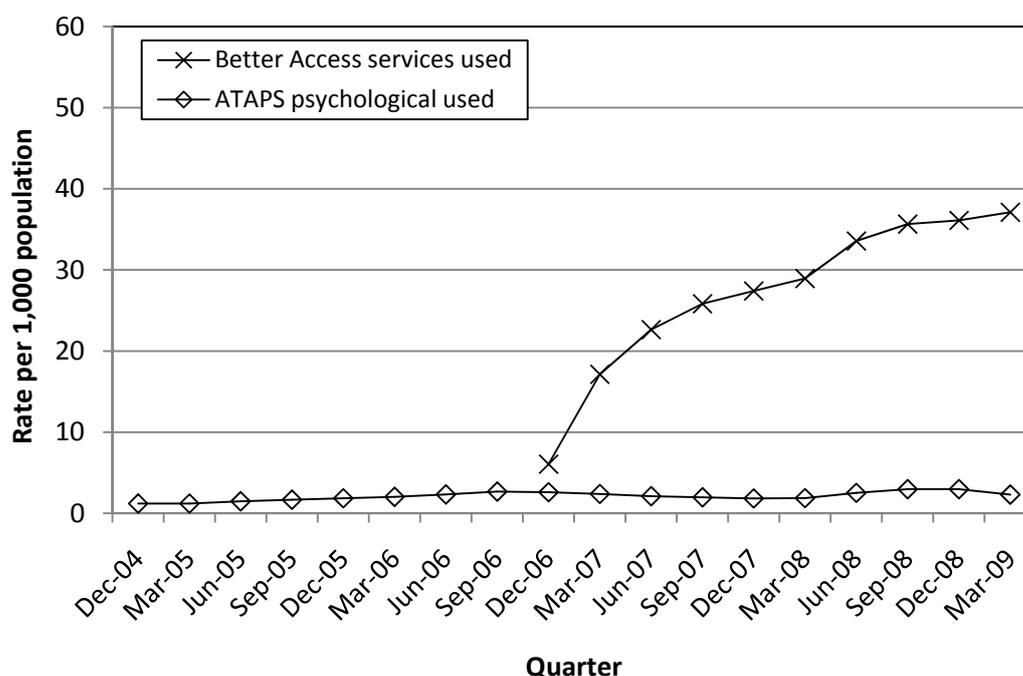
Data have regard to all claims processed up to and including 30 April 2009.

<sup>a</sup>The ratio of the post-*Better Access* trend to the pre-*Better Access* trend.

Figures 9.17 and 9.18 show the rates of uptake of *Better Access* MBS items and ATAPS from the December 2004 quarter (i.e. 2 years prior to the commencement of *Better Access*) to the March 2009 quarter for rural and remote Divisions., for persons and services respectively.



**Fig 9.17** Persons using *Better Access* and ATAPS, December 2004 quarter to March 2009 quarter (rate per 1,000 population), rural and remote Divisions



**Fig 9.18** *Better Access* items used and ATAPS sessions delivered, December 2004 quarter to March 2009 quarter (rate per 1,000 population), rural and remote Divisions

The rate of persons using ATAPS in rural and remote Divisions ranged from 0.49 per 1,000 total population in the December 2004 quarter to 0.93 per 1,000 in the March 2009 quarter. The rate of ATAPS psychological services ranged from 1.20 per 1,000 total population in the December 2004 quarter to 2.29 per 1,000 in the March 2009 quarter.

Analyses were undertaken to determine whether the patterns of uptake of ATAPS in rural and remote Divisions had changed since *Better Access* was introduced. The trend for the pre-*Better Access* period (December 2004 quarter to September 2006) was compared to the trend for the post-*Better Access* period (March 2007 quarter to the March 2009 quarter). These analyses showed that rates had stabilised in the post-*Better Access* period, representing significant change in trend from the strong growth in the pre-*Better Access* period (see Table 9.14).

**Table 9.14** Estimated change in trends in uptake of ATAPS, before and after the introduction of *Better Access*, rural and remote Divisions

	Trend pre- <i>Better Access</i>		Trend post- <i>Better Access</i>		Ratio of trends <sup>a</sup>	
	RR (95% CI)	P	RR (95% CI)	P	RR (95% CI)	P
Persons using services	1.133 (1.091-1.178)	<0.001	1.033 (0.997-1.070)	0.074	0.911 (0.864-0.961)	0.001
Services used	1.141 (1.097-1.187)	<0.001	1.034 (0.998-1.070)	0.061	0.906 (0.859-0.955)	<0.001

Data have regard to all claims processed up to and including 30 April 2009.

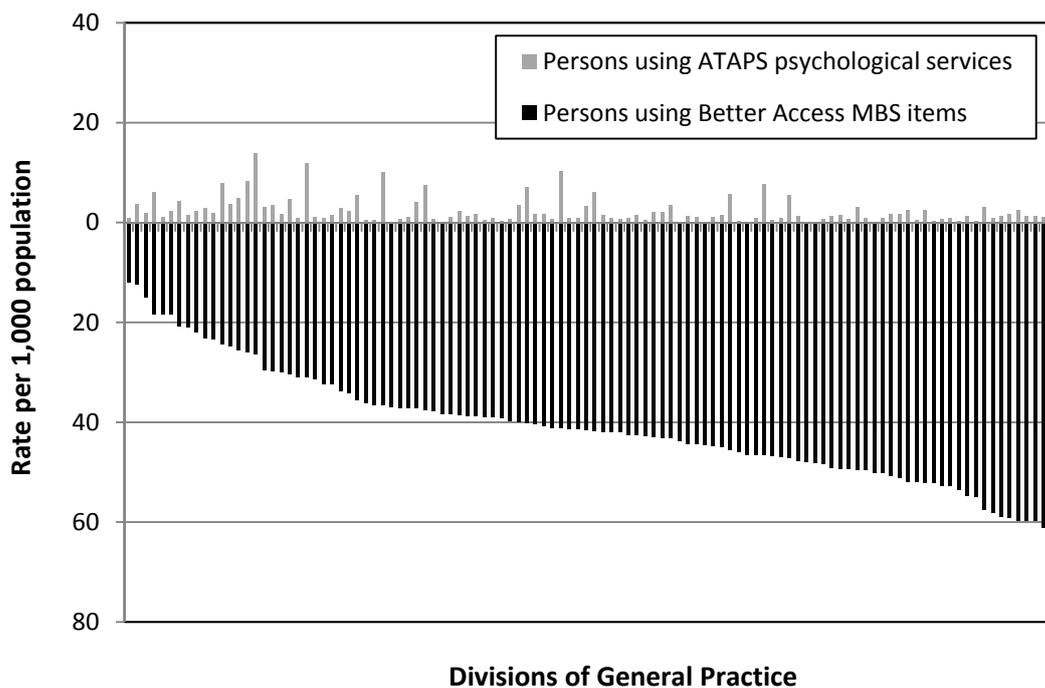
<sup>a</sup>The ratio of the post-*Better Access* trend to the pre-*Better Access* trend.

Taken together, these findings indicate two key points. Firstly, as shown in Figures 9.15-9.18, ATAPS has greater penetration in rural and remote areas, relative to metropolitan areas. In contrast, *Better Access* has greater penetration in metropolitan areas, as compared to rural and remote areas. Additional regression analyses confirm that rates of ATAPS population uptake were twice as high in rural and remote areas compared to metropolitan regions in the pre-*Better*

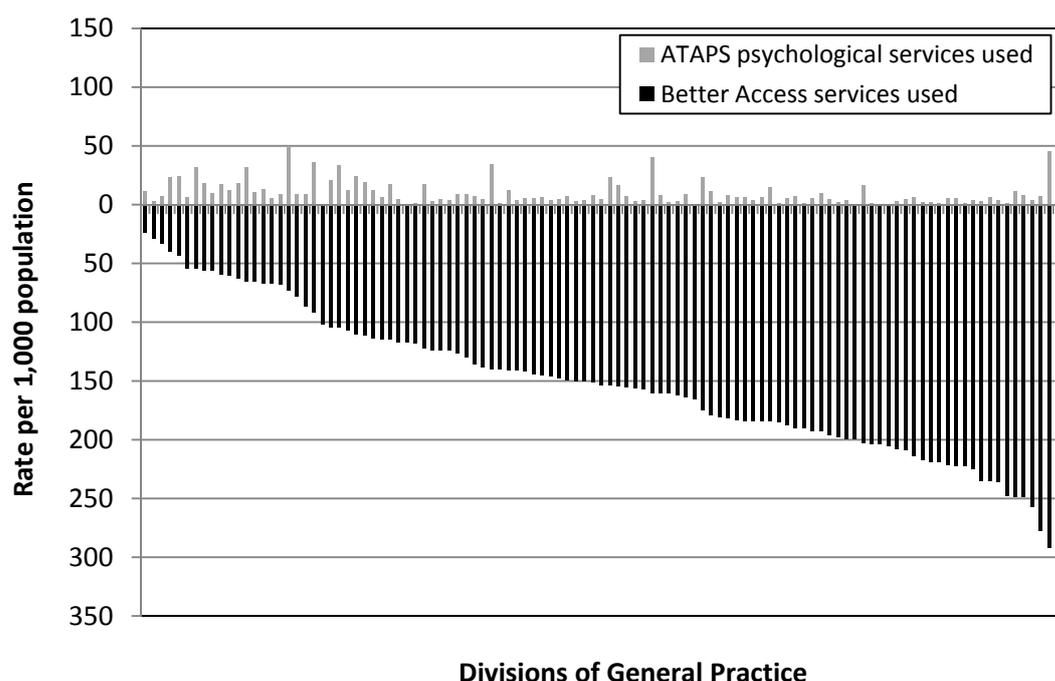
Access period (RR = 2.098, 95% CI 1.861-2.366,  $P < 0.001$ ), and were two and a half times greater in rural and remote areas compared to metropolitan areas (RR = 2.553, 95% CI 2.258-2.886;  $P < 0.001$ ) in the post-*Better Access* period. Rates of *Better Access* population uptake were one-third lower in rural and remote areas than in metropolitan regions (RR = 0.697, 95% CI 0.668-0.722;  $P < 0.001$ ). Secondly, although rates of ATAPS uptake appear to have slowed since the introduction of *Better Access*, the reach of ATAPS services into rural and remote areas does not appear to have diminished. If anything it appears to have increased.

## 9.8 WHAT IS THE RELATIONSHIP BETWEEN *BETTER ACCESS* UPTAKE AND DEMAND FOR ATAPS PSYCHOLOGICAL SERVICES AT A DIVISION LEVEL?

Analyses then examined the relationship, within Divisions, between the uptake of *Better Access* and ATAPS. These focused on the period since the introduction of *Better Access*. Specifically, analyses were restricted to 2008 data, as this was considered these more likely to be representative of established service use patterns than earlier data. Figures 9.19 and 9.20 show the patterns of uptake of *Better Access* and ATAPS by Division of General Practice.



**Fig 9.19** Persons using *Better Access* and ATAPS, 2008 (rate per 1,000 population), by Division of General Practice



**Fig 9.20** Total *Better Access* items used and ATAPS sessions delivered, 2008 (rate per 1,000 population), by Division of General Practice

Table 9.15 shows the summary statistics for non-*Better Access* mental health MBS items for Divisions of General Practice in Australia, in 2008.

**Table 9.15** Summary statistics for ATAPS and *Better Access* uptake for Divisions of General Practice in Australia, 2008

Division level measures	Summary statistics		
	Range	Mean	SD
Persons using ATAPS (per 1,000)	0.02-13.9	2.4	2.7
ATAPS sessions delivered (per 1,000)	0.11-49.6	9.7	9.9
<i>Better Access</i> users (per 1,000)	12.1-75.7	41.3	11.9
<i>Better Access</i> services used (per 1,000)	23.6-398.1	156.5	67.9

Data have regard to all claims processed up to and including 30 April 2009.

SD, standard deviation.

The relationship between uptake of ATAPS and *Better Access* was examined using negative binomial regression models. The first model used total persons using ATAPS in the Division as the dependent variable, and adjusted for the size of the population in each stratum of the dataset by incorporating the logarithm of the population size as an offset term. The main predictor was the rate of *Better Access* users (per 1,000) in the Division. The second model used total ATAPS sessions delivered in the Division as the dependent variable, and adjusted for the size of the population in each stratum of the dataset by incorporating the logarithm of the population size as an offset term. The main predictor was the rate of *Better Access* services used (per 1,000) in the Division.

Tables 9.16 and 9.17 present the results of the regression analyses. These show that Divisions with higher rates of persons using *Better Access* items have significantly lower rates of persons

using ATAPS (Table 9.15). A similar result was found for the relationship between *Better Access* items used and ATAPS sessions delivered (Table 9.16).

**Table 9.16** Negative binomial regression estimates of rate ratios with 95% CIs for persons using ATAPS, 2008

	Rate ratio	95% CI	P
<i>Better Access</i> users (per 1,000) in Division	0.978	0.965-0.992	0.002

**Table 9.17** Negative binomial regression estimates of rate ratios with 95% CIs for total ATAPS sessions delivered, 2008

	Rate ratio	95% CI	P
<i>Better Access</i> services used (per 1,000) in Division	0.996	0.994-0.998	0.001

## 9.9 DOES THE RELATIONSHIP BETWEEN *BETTER ACCESS* UPTAKE AND DEMAND FOR ATAPS PSYCHOLOGICAL SERVICES AT A DIVISION LEVEL DIFFER BETWEEN METROPOLITAN AND RURAL OR REMOTE REGIONS?

Analyses were then undertaken to examine whether the relationship between *Better Access* and ATAPS differed between metropolitan and rural or remote areas.

Table 9.18 shows the summary statistics for ATAPS uptake, separately for Divisions of General Practice classified as metropolitan and rural or remote, and *Better Access* uptake in 2008.

**Table 9.18** Summary statistics for ATAPS uptake, separately for metropolitan and rural/remote Divisions, and *Better Access* uptake, 2008

Division level measures	Summary statistics		
	Range	Mean	SD
<b>Metropolitan Divisions</b>			
Persons using ATAPS (per 1,000)	0.02-8.00	1.4	1.5
ATAPS sessions delivered (per 1,000)	0.11-45.7	6.6	7.9
<i>Better Access</i> users (per 1,000)	18.4-75.7	46.7	8.8
<i>Better Access</i> services used (per 1,000)	54.7-398.1	192.1	54.6
<b>Rural or remote Divisions</b>			
Persons using ATAPS (per 1,000)	0.06-13.9	3.6	3.2
ATAPS sessions delivered (per 1,000)	0.23-49.6	13.4	10.9
<i>Better Access</i> users (per 1,000)	12.1-64.0	35.0	12.1
<i>Better Access</i> services used (per 1,000)	23.6-248.0	113.9	57.2

Data have regard to all claims processed up to and including 30 April 2009.

SD, standard deviation.

Tables 9.19 and 9.20 present the results of the regression analyses for metropolitan regions. These show that metropolitan Divisions with higher rates of persons using *Better Access* items also have higher rates of persons using ATAPS (Table 9.19). However there was no corresponding relationship found between *Better Access* items used and ATAPS sessions delivered (Table 9.20).

**Table 9.19** Negative binomial regression estimates of rate ratios with 95% CIs for persons using ATAPS, 2008, metropolitan regions.

	Rate ratio	95% CI	P
<i>Better Access</i> users (per 1,000) in Division	1.029	1.006-1.052	0.014

**Table 9.20** Negative binomial regression estimates of rate ratios with 95% CIs for ATAPS sessions delivered, 2008, metropolitan regions.

	Rate ratio	95% CI	P
<i>Better Access</i> services used (per 1,000) in Division	1.002	0.998-1.006	0.292

Tables 9.21 and 9.22 present the results of the regression analyses for rural and remote regions. These show that rural and remote Divisions with higher rates of persons using *Better Access* had significantly lower rates of persons using ATAPS (Table 9.21). A similar, although less strong, effect was found for the relationship between *Better Access* items used and ATAPS sessions delivered (Table 9.22).

**Table 9.21** Negative binomial regression estimates of rate ratios with 95% CIs for persons using ATAPS, 2008, rural or remote regions

	Rate ratio	95% CI	P
<i>Better Access</i> users (per 1,000) in Division	0.975	0.951-1.00	0.046

**Table 9.22** Negative binomial regression estimates of rate ratios with 95% CIs for ATAPS sessions delivered, 2008, rural or remote regions

	Rate ratio	95% CI	P
<i>Better Access</i> services used (per 1,000) in Division	0.993	0.989-0.997	0.002

## 9.10 SUMMARY OF FINDINGS

Analyses showed no evidence, at a Division level, of any reduction in demand for non-*Better Access* mental health MBS related to the introduction of *Better Access*. Rates of non-*Better Access* MBS item use were stable in the two years before and after the introduction of *Better Access*. However Divisions with higher uptake of *Better Access* also had significantly higher uptake of other mental health MBS items. This was the case in both metropolitan and rural and remote regions.

The uptake of ATAPS psychological services has been increasing overall since late 2004. Rates of uptake of ATAPS psychological services continued to grow in the post-*Better Access* period, although the rate of growth was significantly slower than in the pre-*Better Access* period. Further analysis showed that this pattern was true for metropolitan regions, whereas in rural and remote regions, uptake had stabilised after the introduction of *Better Access*.

Other patterns varied according to rurality/urbanicity. ATAPS psychological services have proportionally greater penetration into rural and remote regions than metropolitan regions (whereas the reverse is true for *Better Access*). This pattern was not affected by the introduction

of *Better Access*. If anything, the relative reach of ATAPS into rural and remote regions appears have increased.

At a Division level, overall demand for ATAPS psychological services appears to be related to patterns of demand for *Better Access* services. Divisions with higher population uptake of *Better Access* appeared to have lower population uptake of ATAPS psychological services. Higher rates of *Better Access* services used were also associated with lower rates of ATAPS psychological services used. However, further analysis revealed that this pattern differed according to rurality. In metropolitan regions, Divisions with higher uptake of *Better Access* also had significantly higher population uptake of ATAPS psychological services, but not higher rates of services used. In contrast, in rural or remote regions, Divisions with higher uptake of *Better Access* had significantly lower population uptake of ATAPS psychological services, and lower rates of ATAPS psychological services used.