



**Evaluation of the Better Access to Psychiatrists,
Psychologists and General Practitioners through the
Medicare Benefits Schedule Initiative**

Summative Evaluation

FINAL REPORT

Jane Pirkis¹, Meredith Harris², Wayne Hall³, Maria Ftanou¹

1. Centre for Health Policy, Programs and Economics, Melbourne
School of Population Health, The University of Melbourne
2. School of Population Health, The University of Queensland
3. The University of Queensland Centre for Clinical Research

22 February 2011

Table of contents

| | |
|---|----|
| <i>Executive summary</i> | 2 |
| <i>Chapter 1: Background</i> | 12 |
| <i>Chapter 2: Overview of evaluation questions and data sources</i> | 15 |
| <i>Chapter 3: Question 1 – Has Better Access improved access to mental health care?</i> | 23 |
| <i>Chapter 4: Question 2 – Is Better Access an effective (and cost-effective) model of service delivery?</i> | 37 |
| <i>Chapter 5: Question 3 – Has Better Access had an impact on the profile and operation of Australia’s mental health workforce?</i> | 41 |
| <i>Chapter 6: Discussion and conclusions</i> | 44 |
| <i>References</i> | 47 |
| <i>Appendix 1: Relationship between original evaluation framework and current evaluation questions</i> | 50 |
| <i>Appendix 2: Assessing the effects of uncertainty in the Department of Health and Ageing’s estimate of the proportion of Australians with a mental disorder who received mental health care each year between 2006-07 and 2009-10</i> | 51 |

Executive summary

This summative evaluation draws on data from 20 sources to examine whether Better Access has improved access to mental health care, has provided an effective (and cost-effective) model of service delivery, and has changed the profile and operation of Australia's mental health workforce. Each of these data sources has strengths and weaknesses but collectively they provide a picture of the achievements of Better Access.

There is good evidence that Better Access has improved access to mental health care for people with common mental disorders. Uptake of Better Access services has been high in absolute terms, even among relatively disadvantaged groups in the community. Better Access is not just catering to people who were already in receipt of care and/or who have relatively mild symptoms; it is reaching significant numbers of people who have not previously accessed mental health care; and it is providing treatment for people who have severe symptoms and debilitating levels of distress.

Consumers are generally positive about Better Access as a model of service delivery and they appreciate the clinical care they have received. They are also reporting positive outcomes as assessed by reductions on standardised measures of psychological distress, depression, anxiety and stress. In the main, these outcomes are related to clinical and treatment factors rather than socio-demographic characteristics. Preliminary analysis of outcome and cost data for consumers seen by psychologists through Better Access suggests that the initiative is providing good value for money; equivalent data were not available for consumers seen by other provider groups.

These achievements do not seem to be occurring at the expense of other parts of the mental health system. The numbers of allied health professionals in public mental health services have continued to rise, despite the attraction of working as private practitioners in the primary mental health care sector. In fact, Better Access may have had a positive effect on the way in which the Australian mental health workforce operates, with some indications that providers are engaging in more collaborative care.

These achievements should not be under-estimated. Good mental health is important to the capacity of individuals to lead a fulfilling life (e.g., by studying, working, pursuing leisure interests, making housing choices, having meaningful relationships with family and friends, and participating in social and community activities). This major mental health reform seems to have improved access to and outcomes from primary mental health care for people with moderate to severe common mental disorders.

Background and method

The Better Access to Psychiatrists, Psychologists and General Practitioners through the Medicare Benefits Schedule (Better Access) initiative was introduced in November 2006 in response to low treatment rates for common mental disorders (e.g., anxiety, depression and substance use disorders). Its ultimate aim is to improve outcomes for people with these disorders by encouraging a multi-disciplinary approach to their care. Its key feature is the inclusion of a series of new item numbers on the Medicare Benefits Schedule to provide a rebate for selected services provided by particular providers, namely GPs (recognised as a core part of the general mental health workforce) and psychiatrists, psychologists, social workers and occupational therapists (recognised as specialist mental health service providers).¹

A framework was developed at the commencement of the Better Access initiative to guide its evaluation.² Consistent with this framework, the Department of Health and Ageing

commissioned an evaluation of the Better Access initiative to assess its overall appropriateness, effectiveness and impact. The evaluation framework originally included six components (Components A-F), and a seventh was subsequently added (Component A.2). In addition, several independent pieces of work have been conducted that can inform the evaluation. The components and additional data sources are shown in Table i.

Table i: Evaluation components and additional data sources

| | |
|--|---|
| Part of original evaluation framework | Component A: A study of consumers and their outcomes³ – In this study Better Access providers recruited 5-10 consumers to participate, according to a protocol. Forty one clinical psychologists recruited 289 consumers, 49 registered psychologists recruited 317 consumers, and 39 GPs recruited 277 consumers. Consumers were profiled on a range of socio-demographic, clinical and treatment variables, and their outcomes were monitored. Consumers and providers were also interviewed/surveyed about their respective experiences with receiving and delivering Better Access care. |
| | Component A.2: A study of consumers and their outcomes (focusing on the occupational therapy and social work sectors)⁴ – In this study Better Access providers invited 2-5 consumers to participate, according to a protocol. One hundred and ninety one social workers recruited 458 consumers, and 35 occupational therapists recruited 72 consumers. Consumers and providers were interviewed/surveyed about their respective experiences with receiving and delivering Better Access care. |
| | Component B: Analysis of Medicare Benefits Schedule and Pharmaceutical Benefits Scheme administrative data⁵ – This involved analysis of routinely-collected data from a range of sources (e.g., person- and service-level Medicare Benefits Schedule mental health item data and Pharmaceutical Benefits Scheme data, 2007 National Survey of Mental Health and Wellbeing, and the Access to Allied Psychological Services projects’ minimum dataset). It addressed questions relating to the access, affordability, equity, and interdisciplinary nature of Better Access services, and the potential impact of Better Access on service use in other parts of mental health system. |
| | Component C: An analysis of allied mental health workforce supply and distribution⁶ – This involved the analysis of routinely-collected data from a range of sources (e.g., Medicare Benefits Schedule and Medicare provider data, Australian Bureau of Statistics 2006 Census of Population and Housing, Mental Health Establishments – National Minimum Data Set, Registration Board and other administrative data, and stakeholder consultations). It addressed issues related to identifying and characterising the actual and potential Better Access workforce, the impact of Better Access on the distribution of the allied mental health workforce, and future workforce needs. |
| | Component D: Stakeholder consultations⁷ – This involved consultations with 1,200 stakeholders (e.g., service providers from the private, public and non-government sectors, representatives of professional bodies, health insurers, consumers and carers) regarding their views about Better Access. |
| | Component E: Evaluation of main education and training projects^{8,9} – The most prominent education and training initiative was the Mental Health Professionals Network (MHPN), which undertook a large-scale project to promote interdisciplinary networking. The evaluation of this initiative drew on data from nearly 20 sources, some internal and some external, some routinely-collected (e.g., workshop and network attendance data) and some purpose-designed (e.g., surveys). |
| | Component F: An analysis of the second National Survey of Mental Health and Wellbeing, completed in 2007¹⁰ – The 2007 National Survey of Mental Health and Wellbeing was a nationally representative household survey of 8,841 individuals aged 16-85. The survey instrument was based on the World Mental Health Survey Initiative version of the Composite International Diagnostic Interview. It also collected information on the respondents’ mental health status to assess whether or not they had experienced an affective disorder, an anxiety disorder and/or a substance use disorder during their lifetime, the past 12 months or the past 30 days. The survey also collected information on respondents’ health service use and perceived needs for care, and a range of related variables (e.g., respondents’ levels of functioning and disability, levels of psychological distress, quality of life) and socio-demographic variables. |
| Additional data sources | Independent analyses of the 2007 National Survey of Mental Health and Wellbeing, including comparisons with the 1997 National Survey of Mental Health and Wellbeing¹¹⁻¹⁶ – Several members of our team and others have also conducted independent analyses of National Survey of Mental Health and Wellbeing data. Harris et al explored the use of Medicare-subsidised allied |

| | |
|--|---|
| | health services among people with a need for mental health treatment and Burgess et al considered service use for mental health problems more generally. The summative evaluation also makes reference to other more general publications on the 2007 National Survey of Mental Health and Wellbeing, and comparisons with the 1997 National Survey of Mental Health and Wellbeing, conducted before the introduction of Better Access. |
| | Relevant Department of Health and Ageing documentation¹⁷ – The Department of Health and Ageing has undertaken work to calculate current treatment rates for people with common mental disorders for each of the four financial years since Better Access was implemented. |
| | Post-implementation review of Better Access¹⁸ – This was conducted by the Department of Health and Ageing to assess the uptake, implementation and appropriate use of the Better Access item numbers. It involved analysis of service-level, patient-level and provider-level Medicare data, as well as consultations with stakeholders. |
| | Australian Institute of Health and Welfare (AIHW) analyses of service-level and patient-level Medicare data^{19 20} – As part of its routine reporting on mental health services in Australia, the AIHW has analysed the number of Medicare-funded services provided and patients served by GPs, psychiatrists, psychologist and other allied mental health professionals. |
| | Independent analyses of service-level Medicare data²¹⁻²⁶ – Several independent analyses of service-level Medicare data have been conducted, including ones by Russell, Bassilios et al, Fletcher et al, Whiteford et al. |
| | The Bettering the Evaluation and Care of Health (BEACH) program^{27 28} – BEACH is a continuous national study of general practice activity. Each year, BEACH recruits 1,000 GPs who provide data on 100 consecutive encounters in their practices. Analyses have examined trends in GP encounters for psychological problems, and the use of Medicare Benefits Schedule items for these encounters. |
| | A study of uptake of Better Access item numbers by women²⁹ – This study examined the uptake of Better Access item numbers among women with depression and anxiety, linking survey data from 14,911 participants in the Australian Longitudinal Study on Women's Health (ALSWH) to their Medicare records for the period November 2006-December 2007. |
| | Australian Psychological Society surveys of members^{30 31} – The Australian Psychological Society conducts ad hoc surveys of its members. The surveys examined participants' experiences with delivering care under Better Access |
| | Independent surveys of occupational therapists³² – This involved surveys of occupational therapists conducted six months (n=21) and 12 months (n=44) after the introduction of Better Access. The surveys examined participants' experiences with delivering care under Better Access. |
| | Independent survey of psychologists³³ – This involved a survey of 73 psychologists conducted in the year after Better Access was introduced. The surveys examined participants' experiences with delivering care under Better Access. |
| | Australian Psychological Society survey of consumers³⁴ – The Australian Psychological Society conducted a one-off survey of consumers receiving Medicare-funded psychological services under Better Access. Equal numbers of clinical and registered psychologists with a Medicare provider number recruited consumers. In total, 2,223 consumers were recruited. These consumers provided socio-demographic, clinical and treatment information, and offered their perceptions of treatment effectiveness. |
| | A study of outcomes for consumers seen by psychologists through Better Access^{35 36} – This study examined outcomes for 525 consumers seen by psychologists in a single private practice. |
| | A study of outcomes for consumers seen by occupational therapists through Better Access³⁷ – This study examined outcomes for 31 consumers recruited by a single occupational therapist. |

From the outset, the evaluation framework included a summative evaluation that was designed to synthesise the findings from the evaluation components and additional data sources to answer a series of evaluation questions. The relationship between the evaluation questions and data sources is outlined in Table ii, below.

Table ii: Key questions and data sources

| PRIMARY QUESTIONS | SECONDARY QUESTIONS | RELEVANT SOURCES |
|---|---|---|
| 1. Has Better Access improved access to mental health care? | 1a. What is the overall level of uptake of Better Access services? | <ul style="list-style-type: none"> • Component B⁵ • Post-implementation review of Better Access¹⁸ • Australian Institute of Health and Welfare (AIHW) analyses of service-level and patient-level Medicare data^{19 20} • Independent analyses of service-level Medicare data²¹⁻²⁶ |
| | 1b. Has Better Access increased the treatment rates of people with mental disorders? | <ul style="list-style-type: none"> • Independent analyses of 2007 and 1997 National Surveys of Mental Health and Wellbeing^{11 13 15} • Component F¹⁰ • Relevant Department of Health and Ageing documentation¹⁷ |
| | 1c. Has Better Access reached groups who are traditionally disadvantaged in terms of access to mental health care and, if so, has the rate of Better Access uptake improved over time for these groups? | <ul style="list-style-type: none"> • Component B⁵ • Post-implementation review of Better Access¹⁸ • Australian Institute of Health and Welfare (AIHW) analyses of service-level and patient-level Medicare data^{19 20} • Independent analyses of service-level Medicare data²¹⁻²³ • Independent analyses of 2007 National Survey of Mental Health and Wellbeing¹⁴ • Bettering the Evaluation and Care of Health (BEACH) program^{27 28} • A study of uptake of Better Access item numbers by women²⁹ |
| | 1d. Has Better Access reached new consumers? | <ul style="list-style-type: none"> • Component A³ • Component B⁵ • Independent analyses of 2007 National Survey of Mental Health and Wellbeing¹⁴ • Australian Psychological Society surveys of members^{30 31} • Bettering the Evaluation and Care of Health (BEACH) program^{27 28} • A study of uptake of Better Access item numbers by women²⁹ |
| | 1e. Has Better Access reached consumers with moderate to severe disorders, or has it predominantly provided care to those with mild symptoms? | <ul style="list-style-type: none"> • Component A³ • Component B⁵ • Independent analyses of 2007 National Survey of Mental Health and Wellbeing¹⁴ • A study of uptake of Better Access item numbers by women²⁹ |
| 2. Is Better Access an effective (and cost-effective) model of service delivery? | 2a. Is Better Access achieving positive outcomes for consumers? | <ul style="list-style-type: none"> • Component A³ • Component A.2⁴ • Australian Psychological Society survey of consumers³⁴ • A study of outcomes for consumers seen by psychologists through Better Access^{35 36} • A study of outcomes for consumers seen by occupational therapists |

| | | |
|--|--|---|
| | | through Better Access ³⁷ • Post-implementation review of Better Access ¹⁸ • Component D ⁷ |
| | 2b. Do some consumers experience better outcomes than others? | • Component A ³ |
| | 2c. Is Better Access a cost-effective way of delivering primary mental health care? | • Component A ³ • Component B ⁵ |
| 3. Has Better Access had an impact on the profile and operation of Australia's mental health workforce? | 3a. To what extent has Better Access had an impact on the distribution of allied health professionals in the public and private mental health sectors? | • Component C ⁶ • Component D ⁷ • Australian Psychological Society surveys of members ^{30 31} • Independent surveys of occupational therapists ³² • Independent survey of psychologists ³³ |
| | 3b. Has Better Access improved multi-disciplinary collaboration between mental health care providers? | • Component A ³ • Component A.2 ⁴ • Australian Psychological Society surveys of members ^{30 31} • Independent surveys of occupational therapists ³² • Independent survey of psychologists ³³ • Component E ^{8 9} |

Each of the data sources available to the summative evaluation had its own methodological strengths and weaknesses. In addition, the data sources provided more information about some components of Better Access than others. For example, Component A³ successfully recruited large and reasonably representative samples of providers (n=129) and consumers (n=883), and collected data that were not available from any other source (e.g., consumer-level clinical, treatment and outcome data). However, the self-selection of providers and consumers may have introduced biases, and there was no capacity to include non-English speaking consumers. In addition, Component A primarily considered outcomes for consumers seen by clinical and registered psychologists. It collected data on outcomes for consumers seen by GPs, but these data were difficult to interpret because these consumers may have been treated by the GP in isolation or may have been referred to an allied health professional for care. Component A attempted to collect data on outcomes for consumers seen by psychiatrists but participation by this group of providers was low. It was beyond the scope of Component A to collect standardised outcome data for consumers seen by social workers and occupational therapists, although Component A.2⁴ gauged the experiences of these consumers via self-report.

Despite these limitations, the recourse to different data sources with different strengths and different emphases allowed for the triangulation of findings. It is fair to say that the findings provide a reasonably consistent picture of the achievements of Better Access, which engenders confidence in the conclusions that can be drawn from them. Caveats about data limitations are indicated in Table 1 in the body of the report, and highlighted in the text where appropriate.

Key findings

1. Has Better Access improved access to mental health care?

1a. What is the overall level of uptake of Better Access services?

Data from Component B⁵ showed that the overall uptake of the initiative has been high and has increased over time: 710,840 Australians (one in every 30) received at least one Better Access service in 2007, 951,454 (one in every 23) did so in 2008 and 1,130,384 (one in every 19) did so in 2009. After accounting for some people who received services in more than one year, this

equates to 2,016,495 unique individuals who received services over the three year period. These consumers received a total of 2.7 million Better Access services in 2007, 3.8 million in 2008 and more than 4.6 million in 2009 – or a total of 11,144,130 services across the three year period. More than half of all Better Access services delivered were bulk-billed, and the average co-payment was around \$35.

1b. Has Better Access increased the treatment rates of people with mental disorders?

It is difficult to estimate the precise extent to which the uptake of Better Access has increased treatment rates for Australians. The most relevant data source – the 2007 National Survey of Mental Health and Wellbeing, used in Component F – was conducted in the first year of operation of Better Access, before it had become fully established, and could not provide data on treatment rates after 2007. A comparison of 2007 and 1997 National Surveys of Mental Health and Wellbeing data indicated that in 2007 persons with mental disorders were more likely to seek specialist mental health care than they were in 1997, but that the overall treatment rate had remained fairly stable at about 35%. Modelling by the Department of Health and Ageing used a variety of more recent data sources to estimate the percentage of people with mental disorders who had received mental health treatment since the introduction of Better Access. This modelling suggested that in 2009-10, 46% of individuals with a current mental disorder received some form of mental health treatment. Assessments of the effects of uncertainty on these estimates indicated that there has been a real increase in treatment rates for common mental disorders in the period 2006-07 to 2009-10.

1c. Has Better Access reached groups who are traditionally disadvantaged in their access to mental health care and. If so, has the rate of Better Access uptake improved over time for these groups?

The summative evaluation was not able to assess this question for all groups who are traditionally disadvantaged in their access to mental health care, because no data were available for some (e.g., people from culturally and linguistically diverse backgrounds, Aboriginal and Torres Strait Islander people). It was, however, able to examine access for young people and older people, people in rural and remote areas, and people in areas of high socio-economic disadvantage. Component B⁵ showed differentials in uptake rates on the basis of age, geographic region and socio-economic disadvantage. Separate analyses of service-level Medicare data conducted for the Post-Implementation Review of Better Access¹⁸ and the Australian Institute of Health and Welfare's annual reports on mental health services^{19 20} corroborate these findings, as do independent analyses conducted by Russell.²¹⁻²³

Component B⁵ demonstrated that although some groups have had greater levels of uptake of Better Access than others, Better Access has reached all groups. Rates of uptake have consistently increased over time for all groups, and increased most dramatically for those who have been the most disadvantaged in the past. To illustrate, those aged 0-14 years had the lowest rates of uptake (ranging from 10.1/100,000 in 2007 to 19.7/100,000 in 2009) but experienced the greatest percentage change in uptake from 2007 to 2009 (96.1%); those in most other age groups had initial rates of uptake of between 30.0/100,000 and 55.0/100,000 and later rates of uptake of between 50.0/100,000 and 80.0/100,000, and percentage changes of between 50 and 60%. Similarly, those in remote areas had lower rates of uptake than those in other areas but experienced greater percentage increases. The pattern was consistent for those in the most socio-economically disadvantaged areas.

These findings are corroborated by analyses of service-level Medicare data conducted for the Post-Implementation Review of Better Access¹⁸ and the Australian Institute of Health and Welfare's annual reports on mental health services,^{19 20} and by independent analyses conducted by Russell.²¹⁻²³

The above rate estimates rely on the implicit assumption that the prevalence of mental disorders within each sub-group is the same, but this is clearly not always the case. For example, the rates of mental disorders for young people are lower than those for adults. Additional ecological analyses that were undertaken for Component B⁵ and independent analyses of data from the 2007 National Survey of Mental Health and Wellbeing¹⁴ overcame this problem, by modelling level of mental health need at an area level and examining its association with use of Better Access services. Both of these analyses found that level of mental health need was associated with uptake of Better Access. Data from the BEACH program also showed that when mental health need was taken into account differences on other variables diminished.^{27 28}

A study of uptake of Better Access item numbers by women²⁹ showed somewhat different results with respect to socioeconomic factors. Byles et al compared the characteristics of four groups: women who used a Better Access MBS item; women who did not use a Better Access MBS item but had a recent mental health condition; women who did not use a Better Access MBS item but had a past mental health condition; and women who did not use a Better Access MBS item and did not have a mental health condition. They found that women who did not use a Better Access MBS item but had a recent mental health condition included more women who reported difficulty managing on their income and fewer women with post-school qualifications. However they did not find any differences between the groups in terms of area of residence.

As well as considering the relative level of access to Better Access by particular socio-demographic groups, Component B also profiled the costs of Better Access services according to consumers' socio-demographic characteristics. It showed that those with greatest levels of financial need were the biggest beneficiaries of bulk-billed services. The proportion of services that were bulk-billed increased as the level of remoteness and level of relative socio-economic disadvantage increased. The average co-payment decreased as level of relative socio-economic disadvantage increased (from \$38 to \$33). The average co-payment was higher among people in remote areas (\$37) and people in capital cities (\$37) than those in other regions (\$31-\$33).

1d. Has Better Access reached new consumers?

Evidence from a number of sources indicates that Better Access is reaching new consumers. Data from Component A³ suggested that around half of all Better Access consumers may be new, not only to Better Access but to mental health care more generally. Data from Component B⁵ showed that of the 953,161 consumers who had received at least one Better Access service in 2008, more than two thirds were first-time Better Access users. In 2009, more than half of the 1,130,348 consumers served by Better Access were first-time users. Psychologists who participated in the Australian Psychological Society's member surveys^{30 31} indicated that, on average, about 70% of the consumers they see through Better Access have not previously consulted a psychologist. Independent analysis of the 2007 National Survey of Mental Health and Wellbeing¹⁴ estimated that almost two thirds of people who used Better Access allied health services in 2007 had not previously used these services for mental health care.

Data from the study of uptake of Better Access item numbers by women also suggest that the initiative has reached "new" consumers.²⁹ Specifically, this study found that 93% of women who used relevant Better Access items had not previously seen a counsellor, psychologist or social worker.

The only contrary evidence comes from the BEACH program.^{27 28} BEACH data showed that although the rate per 100 encounters at which depression was managed by GPs increased significantly from 1998-99 to 2008-09, the management rate of "new" cases of depression remained constant. There was also no change in the management rate of "new" cases of anxiety or substance use disorders.

1e. Has Better Access reached consumers with moderate to severe disorders, or has it predominantly provided care to those with mild symptoms?

More than 90% of Better Access consumers who participated in Component A³ had a diagnosis of depression and/or anxiety. This compares with 13% of the general population. Around 80% of these consumers reported high or very high levels of psychological distress (as assessed by the Kessler 10, or K-10) when they presented for care, as compared with 10% of the general population.

Byles et al reported similar findings in their study of uptake of Better Access item numbers by participants in the Australian Longitudinal Study on Women's Health.²⁹ They observed that women who used Better Access item numbers tended to have poorer mental health, and that this had often declined prior to their use of the item numbers.

These findings are supported by independent analyses of the 2007 National Survey of Mental Health and Wellbeing.¹⁴ These showed that the vast majority of respondents who had used Medicare-funded allied health services for mental health problems had either a 12-month affective, anxiety or substance use disorder (82%) or had some other indicator of treatment need (12%). It also showed that, among the Better Access allied health consumer group with a current mental disorder, almost half had a severe disorder (47.6%, as opposed to a mild or moderate disorder), 45.5% reported a high level of disability as measured by the World Health Organization Disability Assessment Schedule (WHO-DAS), 45.9% reported high or very high levels of distress as measured by the Kessler-10 (K-10), and 28.1% had experienced more than seven days out of role in the past 30 days.

2. Is Better Access an effective (and cost-effective) model of service delivery?

2a. Is Better Access achieving positive outcomes for consumers?

Better Access appears to be achieving positive outcomes for consumers. Levels of psychological distress (as assessed by the consumer-reported Kessler-10, or K-10) among consumers who were recruited to Component A³ by clinical psychologists, registered psychologists and GPs decreased over the course of their treatment, from high or very high at the start to much more moderate at the end. Consumers who were recruited by the two groups of psychologists also shifted from having moderate or severe levels of depression, anxiety and stress to having normal or mild levels of these symptoms (as assessed by the consumer-reported Depression Anxiety Stress Scales, or DASS-21). The studies of outcomes for consumers seen by psychologists and occupational therapists, conducted by Mackey et al and Hitch et al, respectively, yielded similar results.³⁵⁻³⁷

These findings corresponded with the interview and survey data collected from the consumers recruited by clinical and registered psychologists and GPs in Component A,³ those recruited by social workers and occupational therapists in Component A.2,⁴ and the more general groups of Better Access consumers who contributed their views to Component D.⁷ The majority of these consumers expressed satisfaction with the clinical care they had received through Better Access. They indicated that they had experienced significant changes for the better in terms of their mental health and their ability to cope with stressful situations. Similar findings were reported in the Australian Psychological Society's survey of consumers who received psychological care through Better Access,³⁴ 90% of whom felt that the treatment they had received had led to "significant" (45%) or "very significant" (45%) improvement.

2b. Do some consumers experience better outcomes than others?

Using a series of regression analyses, Component A³ assessed whether particular variables predicted better outcomes as measured by the K-10. The analytic approach assessed the predictive value of a given variable while controlling for all other variables in the particular model, including the initial K-10 score. In the main, socio-demographic factors did not appear to have a major influence on outcomes; equivalent outcomes were achieved irrespective of whether the consumer was male or female, young or old, or wealthy or struggling financially.

Clinical and treatment variables were generally the strongest predictors of outcome. Among consumers recruited by clinical psychologists, registered psychologists and GPs, the greatest gains occurred in those with the worst baseline manifestations of psychological distress (i.e., higher pre-treatment K-10 scores). Among consumers recruited by clinical psychologists, no other variables were predictive of outcomes. Among consumers recruited by registered psychologists, those who had completed treatment or were still in treatment experienced greater gains than those whose treatment was incomplete (e.g., those who had dropped out of treatment), and those living in metropolitan areas showed smaller improvements than their rural counterparts. For consumers recruited by GPs, those who had six sessions of care experienced better outcomes than those who had more or fewer, and those who had no previous history of mental health care showed greater improvement than those who had received mental health care in the past.

2c. Is Better Access a cost-effective way of delivering health care?

An analysis that combined data on outcomes from Component A³ and data on costs from Component B⁵ estimated the typical cost of a Better Access package of care delivered by a psychologist to be \$753.31. This equates to an average of \$73.46 per one-point improvement on the K-10. Previous work has estimated that optimal treatment for anxiety or depressive disorders would cost about \$1,100 in 2010 dollars. On the basis of these estimates, Better Access would appear to provide good value for money in terms of Medicare Benefits Schedule costs to government. It is recognised that this perspective does not take into account other costs to government, costs to consumers, and broader societal costs.

3. Has Better Access had an impact on the profile and operation of Australia's mental health workforce?

3a. To what extent has Better Access had an impact on the distribution of allied health professionals in the public and private mental health sectors?

Better Access has made private practice a more viable option for allied health professionals. This prompted early concerns about an exodus of these providers from public sector mental health services. The stakeholder consultations conducted in Component D⁷ suggested that the shift had not occurred to the extent anticipated. Component C⁶ provided additional evidence by examining the numbers of full time equivalent (FTE) providers in the public mental health sector in each year from 1995-96 to 2007-08 (the Department of Health and Ageing provided supplementary figures for 2008-09 for the purposes of the summative evaluation). Component C⁶ looked at whether there was any drop in these numbers following the introduction of Better Access in late 2006. They found no evidence that Better Access had reduced the size of the public sector mental health workforce. In fact, the numbers of FTE psychologists, social workers and occupational therapists providing care in public sector mental health services have risen steadily since 1995-96. The introduction of Better Access has had no apparent impact on this rate of increase.

3b. Has Better Access improved multi-disciplinary collaboration between mental health care providers?

There is some suggestive evidence that Better Access has improved multi-disciplinary collaboration between mental health care providers. The clinical psychologist, registered psychologists, GPs, social workers and occupational therapists who completed interviews or surveys as part of Component A³ and A.2⁴ indicated that providers had developed an increased appreciation of the role of others in providing mental health care as a result of working together to provide Better Access services.. Having said this, a number of participants noted that communication has not always been optimal; allied health professionals have not always received adequate referral information from GPs, and GPs have sometimes felt that they do not get sufficient feedback from allied health professionals about consumers' progress. These diverse views were reinforced by participants in other relevant surveys of allied health professionals,³⁰⁻³³ and by stakeholders who contributed to the post-implementation review of Better Access.¹⁸

As well as fostering multi-disciplinary care through the conditions of the Medicare item numbers, Better Access has made an explicit attempt to strengthen the links between different provider types through some of its education and training initiatives. In particular, the Mental Health Professionals Network has promoted communication and networking between allied health professionals, GPs and other mental health care providers by running almost 1,200 multi-disciplinary workshops, supported by a range of resources (e.g., education and training materials, a website and web portal, and a 1800 phone line). The evaluation of MHPN, which formed part of Component E, found that these workshops were attended by close to 12,000 individuals, and that four fifths of the workshops had led to ongoing, multi-disciplinary networks of local providers.^{8,9} These networks are currently in their early stages, but there are signs that they are increasing collaboration between providers.

Conclusions

Better Access has increased access to mental health care for significant numbers of Australians. This includes many people who have been traditionally disadvantaged in the past. It has achieved good clinical outcomes for many of these consumers. These achievements should not be underestimated. Good mental health is important to the capacity of individuals to lead a fulfilling life (e.g., by studying, working, pursuing leisure interests, making housing choices, having meaningful relationships with family and friends, and participating in social and community activities). This major mental health reform seems to have improved access to and outcomes from primary mental health care for people with moderate to severe common mental disorders..

Chapter 1: Background

The Better Access initiative

The Better Access to Psychiatrists, Psychologists and General Practitioners through the Medicare Benefits Schedule (Better Access) initiative is one of 18 Australian Government initiatives introduced under the Council of Australian Governments (COAG) National Action Plan on Mental Health 2006-2011.¹

Better Access was introduced in response to low treatment rates for mental disorders, and its ultimate aim is to improve outcomes for people with these disorders by encouraging a multi-disciplinary approach to their mental health care. Underpinning this aim are the following objectives:

- Encouraging more GPs to participate in early intervention, assessment and management of patients with mental disorders and streamlining access to appropriate psychological interventions in primary care;
- Encouraging private psychiatrists to see more new patients;
- Providing referral pathways for appropriate treatment of patients with mental disorders, including by psychiatrists, GPs, clinical psychologists, registered psychologists and other appropriately trained allied mental health professionals; and
- Supporting GPs and primary care service providers with education and training to better diagnose and treat mental illness.

Its key feature is the inclusion of a series of new item numbers on the Medicare Benefits Schedule to provide a rebate for selected services provided by particular providers, namely GPs (recognised as a core part of the general mental health workforce) and psychiatrists, psychologists, social workers and occupational therapists (recognised as specialist mental health service providers).

Under Better Access a series of new item numbers were added to the Medicare Benefits Schedule to provide a rebate for selected services provided by particular providers, namely GPs (recognised as a core part of the general mental health workforce) and psychiatrists, psychologists, social workers and occupational therapists (recognised as specialist mental health service providers). These item numbers were supported by a range of education and training activities for relevant providers and included:

- **GP items numbers:** These reimburse GPs for preparing and reviewing mental health treatment plans (2710^a and 2712, respectively) and providing mental health care consultations (2713);
- **Psychiatrist items numbers:** These reimburse psychiatrists for conducting an initial consultation with a new patient in their consulting rooms, in a hospital or at the patient's home (296, 297 and 299, respectively), for providing and reviewing a patient assessment and management plan (291 and 293, respectively); and

^a And, from 1 January 2010, MBS item 2702.

- **Allied health professional item numbers:** These reimburse clinical psychologists for delivering psychological therapy (80000, 80005, 80010, 80015 and 80020), registered psychologists for providing focused psychological strategies (80100, 80105, 80110, 80115 and 80120), selected occupational therapists for providing focused psychological strategies (80125, 80130, 80135, 80140 and 80145) and selected social workers for providing focused psychological strategies (80150, 80155, 80160, 80165 and 80170).

Evaluation of the Better Access initiative

An evaluation framework was developed at the commencement of the Better Access initiative to guide the evaluation of the initiative.² Consistent with this framework, the Department of Health and Ageing commissioned an evaluation of the Better Access initiative with the objective of assessing the overall appropriateness, effectiveness and impact of the initiative.

Evaluation components

The evaluation framework included six original components, and a seventh was subsequently added. These components are as follows:

- **Component A:** A study of consumers and their outcomes;³
- **Component A.2:** A study of consumers and their outcomes (focusing on the occupational therapy and social work sectors);⁴
- **Component B:** Analysis of Medicare Benefits Schedule and Pharmaceutical Benefits Scheme administrative data;⁵
- **Component C:** An analysis of allied mental health workforce supply and distribution;⁶
- **Component D:** Stakeholder consultations;⁷
- **Component E:** Evaluation of main education and training projects;⁷⁻⁹ and
- **Component F:** An analysis of the second National Survey of Mental Health and Wellbeing, completed in 2007¹⁰

At the end of 2008, the Department of Health and Ageing tendered out Components A, B, C and D. We secured the tenders to conduct Components A³ and B.⁵ We were also invited to conduct Component A.2,⁴ which extended the work of Component A (which focused on GPs, psychologists and psychiatrists) by introducing an emphasis on occupational therapists and social workers. Component C⁶ was conducted by the Institute of Labour Studies at Flinders University and Component D⁷ was conducted by KPMG.

Component E was not tendered out in the same way as Components A-D. Instead, the various organisations that have undertaken education and training activities under the Better Access initiative have been asked to produce project outcome reports. One of the key education and training initiatives, known as the Mental Health Professionals Network, tendered out its own independent evaluation.^{8,9} We were the successful tenderer. Other relevant projects include: various activities of the General Practice Mental Health Standards Collaboration;³⁸ a web-based mental disorders training package for rural practice developed by the Australian College of Rural and Remote Medicine;³⁹ and Better Access orientation/information/education modules developed by the Australian General Practice Network in collaboration with the Australian Psychological Society.⁴⁰

Like Component E, Component F was not put out to tender at the same time as Components A-D. At that stage, data from the National Survey of Mental Health and Wellbeing were not available. Since then, the Department of Health and Ageing has undertaken some of its own analyses of the data from this survey.¹⁰ Several members of our team and others have also conducted independent analyses of National Survey of Mental Health and Wellbeing data. Of particular relevance are a study by Harris et al which explored the use of Medicare-subsidised allied health services among people with a need for mental health treatment,¹⁴ and a study by Burgess et al which considered service use for mental health problems more generally.¹³ The summative evaluation also makes reference to other more general publications on the 2007 National Survey of Mental Health and Wellbeing,^{12 16} and comparisons with an earlier survey, conducted prior to the introduction of Better Access (the 1997 National Survey of Mental Health and Wellbeing).^{11 15}

Summative evaluation

From the outset, the intention of the evaluation framework was that a summative evaluation should be undertaken that would draw synthesise the findings from the above components. The summative evaluation was intended to be far more than a summary of the findings of the evaluation components; it should critically consider how these findings fit with each other and with other available evidence, and offer an in-depth interpretation of the findings to inform the future directions of Better Access.²

The current report

The current report presents the findings of the summative evaluation. The findings are organised around a series of evaluation questions, and draw on data from the above evaluation components, as well as additional material wherever relevant.

Chapter 2: Overview of evaluation questions and data sources

Evaluation questions

The summative evaluation addresses a series of evaluation questions about the appropriateness, effectiveness and impact of Better Access. There are three primary questions that relate to whether Better Access has: improved access to mental health care, been effective in producing positive consumer outcomes, and had any impact on the distribution of the mental health workforce between public and private sectors. Nested under each primary question is a series of secondary questions that explore the achievements of Better Access in more detail. The questions are as follows:

- 1. Has Better Access improved access to mental health care?**
 - a. What is the overall level of uptake of Better Access services?
 - b. Has Better Access increased the treatment rates of people with mental disorders?
 - c. Has Better Access reached groups who are traditionally disadvantaged in their access to mental health care (e.g., people in rural areas, people in areas of socio-economic disadvantage, young people), and if so, has the rate of Better Access uptake improved over time for these groups?
 - d. Has Better Access reached new consumers?
 - e. Has Better Access reached consumers with moderate to severe disorders, or has it predominantly provided care to those with mild symptoms?

- 2. Is Better Access an effective (and cost-effective) model of service delivery?**
 - a. Is Better Access achieving positive outcomes for consumers?
 - b. Do some consumers experience better outcomes than others?
 - c. Is Better Access a cost-effective way of delivering primary mental health care?

- 3. Has Better Access had an impact on the profile and operation of Australia's mental health workforce?**
 - a. To what extent has Better Access had an impact on the distribution of mental health care providers in the public and private sectors?
 - b. Has Better Access improved multi-disciplinary collaboration between mental health care providers?

The current questions have been modified from those in the original evaluation framework to reflect some of the public debate about the implementation and impact of Better Access. The current evaluation questions overlap substantially with those in the original evaluation framework² (see Appendix 1), but a small number are not considered in the summative evaluation.

Data sources

The current report relied on a number of data sources. They included the evaluation components articulated in the original evaluation framework (see Chapter 1), as well as several additional data sources. The full range of data sources is listed in Table 1. Each source is described, and its strengths and weaknesses are outlined. Further detail on each of these data sources is available in the cited reports and journal articles.

Table 1: Data sources

| | DATA SOURCE | DESCRIPTION | STRENGTHS | LIMITATIONS |
|--|--|---|--|---|
| PART OF ORIGINAL EVALUATION FRAMEWORK | Component A: A study of consumers and their outcomes³ | In this study Better Access providers recruited 5-10 consumers to participate, according to a protocol. Forty one clinical psychologists recruited 289 consumers, 49 registered psychologists recruited 317 consumers, and 39 GPs recruited 277 consumers. Consumers were profiled on a range of socio-demographic, clinical and treatment variables, and their outcomes were monitored. Consumers and providers were also interviewed/surveyed about their respective experiences with receiving and delivering Better Access care. | Large and reasonably representative samples of providers and consumers; data collected that weren't available from any other source (e.g., clinical and treatment data, outcome data) for these consumers. | Self-selection of providers and consumers which may have introduced biases; potential differential sample attrition of those who did not improve; no potential to determine whether improvements in outcomes were sustained over time; no capacity to include non-English speaking consumers; reliance on self-report. |
| | Component A.2: A study of consumers and their outcomes (focusing on the occupational therapy and social work sectors)⁴ | In this study Better Access providers invited 2-5 consumers to participate, according to a protocol. One hundred and ninety one social workers recruited 458 consumers, and 35 occupational therapists recruited 72 consumers. Consumers and providers were interviewed/surveyed about their respective experiences with receiving and delivering Better Access care. | Large and reasonably representative samples of providers and consumers; systematic collection of data on consumers' views. | Self-selection of providers and consumers which may have introduced biases; no capacity to include non-English speaking consumers; reliance on self-report. |
| | Component B: Analysis of Medicare Benefits Schedule and Pharmaceutical Benefits Scheme administrative data⁵ | This involved analysis of routinely-collected data from a range of sources (e.g., person- and service-level Medicare Benefits Schedule mental health item data and Pharmaceutical Benefits Scheme data, 2007 National Survey of Mental Health and Wellbeing, and the Access to Allied Psychological Services projects' minimum dataset). It addressed questions relating to the access, affordability, equity, and interdisciplinary nature of Better Access services, and the potential impact of Better Access on service use in other parts of mental health system. | Use of Medicare Benefits Schedule data to provide person-level profiles of Better Access item uptake according to available consumer characteristics; use of ecological analyses combining Medicare Benefits Schedule and other data to explore issues beyond the scope of Medicare Benefits Schedule data alone (e.g., equity, impact on other mental health programs). | Limited socio-demographic data and lack of clinical information available in Medicare Benefits Schedule (and Pharmaceutical Benefits Scheme) data; difficulties in making inferences about individuals from aggregated data (e.g., Medicare Benefits Schedule data could not be linked to other mental health program data to explore the impact of Better Access). |
| | Component C: An analysis of allied mental health workforce supply and distribution⁶ | This involved the analysis of routinely-collected data from a range of sources (e.g., Medicare Benefits Schedule and Medicare provider data, Australian Bureau of Statistics 2006 Census of Population and Housing, Mental Health Establishments – National Minimum Data Set, Registration Board and other administrative data, and stakeholder consultations). It addressed issues related to identifying and characterising the | Consolidation and interpretation of a large amount of data. | Difficulties associated with quantifying the workforce (e.g., determining workforce denominators, converting headcounts to full time equivalents). Difficulties in making inferences about individuals from |

| | DATA SOURCE | DESCRIPTION | STRENGTHS | LIMITATIONS |
|--|--|--|--|---|
| | | actual and potential Better Access workforce, the impact of Better Access on the distribution of the allied mental health workforce, and future workforce needs. | | aggregated data (e.g., no potential for linking public and private sector workforce data to determine how many people may be working part-time in both sectors). |
| | Component D: Stakeholder consultations⁷ | This involved consultations with 1,200 stakeholders (e.g., service providers from the private, public and non-government sectors, representatives of professional bodies, health insurers, consumers and carers) regarding their views about Better Access. | Large number of stakeholders from diverse settings and locations. | Self-selection of stakeholders which may have introduced biases; reliance on self-report; some difficulties in interpreting findings (e.g., deciding what weight to give particular opinions; determining how representative particular views were of specific stakeholder groups). |
| | Component E: Evaluation of main education and training projects^{8,9} | The most prominent education and training initiative was the Mental Health Professionals Network (MHPN), which undertook a large-scale project to promote interdisciplinary networking. The evaluation of this initiative drew on data from nearly 20 sources, some internal and some external, some routinely-collected (e.g., workshop and network attendance data) and some purpose-designed (e.g., surveys). | Evaluation developed alongside the MHPN project, in collaboration with MHPN; drew on information from a number of evaluation components, to allow triangulation of the findings. | Some data sources more reliable than others (e.g., some surveys had sub-optimal response rates); in some cases, certain biases may have been introduced (e.g., because of self-selection of participants); some data were collected before an appropriate establishment period for the relevant activity had elapsed. |
| | Component F: An analysis of the second National Survey of Mental Health and Wellbeing, completed in 2007¹⁰ | The 2007 National Survey of Mental Health and Wellbeing was a nationally representative household survey of 8,841 individuals aged 16-85. The survey instrument was based on the World Mental Health Survey Initiative version of the Composite International Diagnostic Interview. It also collected information on the respondents' mental health status to assess whether or not they had experienced an affective disorder, an anxiety disorder and/or a substance use disorder during their lifetime, the past 12 months or the past 30 days. The survey also collected information on respondents' health service use and perceived needs for care, and a range of related variables (e.g., respondents' levels of functioning and disability, levels of | Large and representative sample of Australian adults. | Excluded children and young adolescents, elderly adults and those who were not fluent in English; response rate was 60%; relied on self-report; covers only early period of Better Access implementation. |

| | DATA SOURCE | DESCRIPTION | STRENGTHS | LIMITATIONS |
|-------------------------|--|---|---|--|
| | | psychological distress, quality of life) and socio-demographic variables. | | |
| ADDITIONAL DATA SOURCES | Independent analyses of the 2007 National Survey of Mental Health and Wellbeing, including comparisons with the 1997 National Survey of Mental Health and Wellbeing¹¹⁻¹⁶ | Several members of our team and others have also conducted independent analyses of National Survey of Mental Health and Wellbeing data. Harris et al explored the use of Medicare-subsidised allied health services among people with a need for mental health treatment and Burgess et al considered service use for mental health problems more generally. The summative evaluation also makes reference to other more general publications on the 2007 National Survey of Mental Health and Wellbeing, and comparisons with the 1997 National Survey of Mental Health and Wellbeing, conducted before the introduction of Better Access. | As above. | As above. In addition, some caution should be exercised in interpreting the comparisons between the 2007 and 1997 National Surveys of Mental Health and Wellbeing because of differences in sampling, survey instruments and response rates. |
| | Relevant Department of Health and Ageing documentation¹⁷ | The Department of Health and Ageing has undertaken work to calculate current treatment rates for people with common mental disorders for each of the four financial years since Better Access was implemented. | Clearly articulated steps in calculating treatment rates; recourse to a range of appropriate data sources to calculate prevalence, service use etc., and correction for data gaps in the National Surveys of Mental Health and Wellbeing. | Reliance on various assumptions in the absence of data for some key parameters in the process. |
| | Post-implementation review of Better Access¹⁸ | This was conducted by the Department of Health and Ageing to assess the uptake, implementation and appropriate use of the Better Access item numbers. It involved analysis of service-level, patient-level and provider-level Medicare data, as well as consultations with stakeholders. | Combination of quantitative data from Medicare (service-, patient- and provider-level) and qualitative data from stakeholders. | Limited socio-demographic data and lack of clinical information available in Medicare Benefits Schedule data; potential for selection and response bias in stakeholder consultations. |
| | Australian Institute of Health and Welfare (AIHW) analyses of service-level and patient-level Medicare data^{19 20} | As part of its routine reporting on mental health services in Australia, the AIHW has analysed the number of Medicare-funded services provided and patients served by GPs, psychiatrists, psychologist and other allied mental health professionals. | Use of Medicare Benefits Schedule data to provide patient-level and service-level profiles of Better Access item uptake according to available consumer characteristics. | Limited socio-demographic data and lack of clinical information available in Medicare Benefits Schedule data. |
| | Independent analyses of service-level Medicare data²¹⁻²⁶ | Several independent analyses of service-level Medicare data have been conducted, including ones by: Russell; Bassilios et al; Fletcher et al; and Whiteford et al. | Use of Medicare Benefits Schedule data to provide service-level profiles of Better Access item uptake according to available consumer characteristics. | Reliance on service-level data to draw person-level conclusions; limited socio-demographic data and lack of clinical information available in Medicare Benefits Schedule data |

| DATA SOURCE | DESCRIPTION | STRENGTHS | LIMITATIONS |
|--|--|--|--|
| The Bettering the Evaluation and Care of Health (BEACH) program^{27 28} | BEACH is a continuous national study of general practice activity. Each year, BEACH recruits 1,000 GPs who provide data on 100 consecutive encounters in their practices. Analyses have examined trends in GP encounters for psychological problems, and the use of Medicare Benefits Schedule items for these encounters. | Provides details on GP encounters that are not available from any other source; large and reasonably representative sample of GPs. | Potential for selection bias; reliance on self-report; very broad listing of eligible "psychological problems". |
| A study of uptake of Better Access item numbers by women²⁹ | This study examined the uptake of Better Access item numbers among women with depression and anxiety, linking survey data from 14,911 participants in the Australian Longitudinal Study on Women's Health (ALSWH) to their Medicare records for the period November 2006-December 2007 | Provides accurate information on use of Better Access items for a large number of women, through linkage to Medicare data | Identifies women as having a mental disorder if they report having received such a diagnosis from a doctor (with supplementary indicators like the SF-36); involves univariate (as opposed to multivariate) analysis of demographic and socio-economic factors; covers only early period of Better Access implementation |
| Australian Psychological Society surveys of members^{30 31} | The Australian Psychological Society conducts ad hoc surveys of its members. The surveys examined participants' experiences with delivering care under Better Access. | Surveys have the imprimatur of the professional body which represents psychologists. | Numbers of respondents and response rates are not always clear; restricted to Australian Psychological Society members. |
| Independent surveys of occupational therapists³² | This involved surveys of occupational therapists conducted six months (n=21) and 12 months (n=44) after the introduction of Better Access. The surveys examined participants' experiences with delivering care under Better Access. | Providers sampled from up-to-date, comprehensive lists of occupational therapists (although a significant proportion could not be contact because they withheld their details); provides unique information on the views of occupational therapists. | Variable response rates (36% in first survey; 80% in second); reliance on self-report. |
| Independent survey of psychologists³³ | This involved a survey of 73 psychologists conducted in the year after Better Access was introduced. The surveys examined participants' experiences with delivering care under Better Access. | Providers sampled from up-to-date, comprehensive lists of occupational; provides unique information on the views of occupational therapists. | Sub-optimal response rate (36%); reliance on self-report. |
| Australian Psychological Society survey of consumers³⁴ | The Australian Psychological Society conducted a one-off survey of consumers receiving Medicare-funded psychological services under Better Access. Equal numbers of clinical and registered psychologists with a Medicare provider number recruited consumers. In total, 2,223 consumers were recruited. These | Large and reasonably representative samples of providers and consumers; systematic collection of data on consumers' views. | Self-selection of providers and consumers which may have introduced biases; no capacity to include non-English speaking consumers; reliance on self-report. |

| | DATA SOURCE | DESCRIPTION | STRENGTHS | LIMITATIONS |
|--|---|---|---|---|
| | | consumers provided socio-demographic, clinical and treatment information, and offered their perceptions of treatment effectiveness. | | |
| | A study of outcomes for consumers seen by psychologists through Better Access^{35,36} | This study examined outcomes for 525 consumers seen by psychologists in a single private practice. | Provides routinely-collected information on outcomes for consumers seen by psychologists. | Generalisability of findings; potential selection biases regarding the inclusion of consumers; potential differential sample attrition of those who did not improve; no potential to determine whether improvements in outcomes were sustained over time. |
| | A study of outcomes for consumers seen by occupational therapists through Better Access³⁷ | This independent study examined outcomes for 31 consumers recruited by a single occupational therapist. | Provides unique information on outcomes for consumers seen by occupational therapists. | Generalisability of findings; potential selection biases regarding the inclusion of consumers; potential differential sample attrition of those who did not improve; no potential to determine whether improvements in outcomes were sustained over time. |

Relationship between evaluation questions and data sources

Table 2 indicates the data sources used to answer each of the evaluation questions.

Table 2: Key questions and data sources

| PRIMARY QUESTIONS | SECONDARY QUESTIONS | RELEVANT SOURCES |
|---|--|---|
| 1. Has Better Access improved access to mental health care? | 1a. What is the overall level of uptake of Better Access services? | <ul style="list-style-type: none"> • Component B⁵ • Post-implementation review of Better Access¹⁸ • Australian Institute of Health and Welfare (AIHW) analyses of service-level and patient-level Medicare data^{19 20} • Independent analyses of service-level Medicare data²¹⁻²⁶ |
| | 1b. Has Better Access increased the treatment rates of people with mental disorders? | <ul style="list-style-type: none"> • Independent analyses of 2007 and 1997 National Surveys of Mental Health and Wellbeing^{11 13 15} • Component F¹⁰ • Relevant Department of Health and Ageing documentation¹⁷ |
| | 1c. Has Better Access reached groups who are traditionally disadvantaged in their access to mental health care and, if so, has the rate of Better Access uptake improved over time for these groups? | <ul style="list-style-type: none"> • Component B⁵ • Post-implementation review of Better Access¹⁸ • Australian Institute of Health and Welfare (AIHW) analyses of service-level and patient-level Medicare data^{19 20} • Independent analyses of service-level Medicare data²¹⁻²³ • Independent analyses of 2007 National Survey of Mental Health and Wellbeing¹⁴ • Bettering the Evaluation and Care of Health (BEACH) program^{27 28} • A study of uptake of Better Access item numbers by women²⁹ |
| | 1d. Has Better Access reached new consumers? | <ul style="list-style-type: none"> • Component A³ • Component B⁵ • Independent analyses of 2007 National Survey of Mental Health and Wellbeing¹⁴ • Australian Psychological Society surveys of members^{30 31} • Bettering the Evaluation and Care of Health (BEACH) program^{27 28} • A study of uptake of Better Access item numbers by women²⁹ |
| | 1e. Has Better Access reached consumers with moderate to severe disorders, or has it predominantly provided care to those with mild symptoms? | <ul style="list-style-type: none"> • Component A³ • Component B⁵ • Independent analyses of 2007 National Survey of Mental Health and Wellbeing¹⁴ • A study of uptake of Better Access item numbers by women²⁹ |
| 2. Is Better Access an effective (and cost-effective) model of service delivery? | 2a. Is Better Access achieving positive outcomes for consumers? | <ul style="list-style-type: none"> • Component A³ • Component A.2⁴ • Australian Psychological Society survey of consumers³⁴ |

| | | |
|--|--|--|
| | | <ul style="list-style-type: none"> • A study of outcomes for consumers seen by psychologists through Better Access^{35 36} • A study of outcomes for consumers seen by occupational therapists through Better Access³⁷ • Post-implementation review of Better Access¹⁸ • Component D⁷ |
| | 2b. Do some consumers experience better outcomes than others? | <ul style="list-style-type: none"> • Component A³ |
| | 2c. Is Better Access a cost-effective way of delivering primary mental health care? | <ul style="list-style-type: none"> • Component A³ • Component B⁵ |
| 3. Has Better Access had an impact on the profile and operation of Australia's mental health workforce? | 3a. To what extent has Better Access had an impact on the distribution of allied health professionals in the public and private mental health sectors? | <ul style="list-style-type: none"> • Component C⁶ • Component D⁷ • Australian Psychological Society surveys of members^{30 31} • Independent surveys of occupational therapists³² • Independent survey of psychologists³³ |
| | 3b. Has Better Access improved multi-disciplinary collaboration between mental health care providers? | <ul style="list-style-type: none"> • Component A³ • Component A.2⁴ • Australian Psychological Society surveys of members^{30 31} • Independent surveys of occupational therapists³² • Independent survey of psychologists³³ • Component E^{8 9} |

Chapter 3: Question 1 – Has Better Access improved access to mental health care?

1a. What is the overall level of uptake of Better Access services?

Since the inception of Better Access, uptake has been substantial and has grown steadily in subsequent years. Data from Component B show that in 2007, 710,840 Australians (one in every 30) received at least one Better Access service. In 2008, 951,454 (one in every 23) Australians did so, and in 2009, 1,130,384 (one in every 19) did so. Better Access uptake increased by 31.7% between 2007 and 2008 before slowing to 18.7% between 2008 and 2009 (see Table 3). After accounting for some people who received services in more than one year, this equates to 2,016,495 unique individuals who received services over the three year period.

Table 3: Persons receiving any Medicare Benefits Schedule-subsidised *Better Access* services, 2007, 2008 and 2009, Component B

| 2007 ¹ | | 2008 ¹ | | | 2009 ¹ | | |
|-------------------|-------------------------------|-------------------|-------------------------------|---------------------|-------------------|-------------------------------|---------------------|
| N persons | Rate (per 1,000) ² | N persons | Rate (per 1,000) ² | Increase since 2007 | N persons | Rate (per 1,000) ² | Increase since 2008 |
| 710,840 | 33.8 | 951,454 | 44.5 | 31.7% | 1,130,384 | 52.8 | 18.7% |

- 2007 and 2008 figures have regard to all claims processed up to and including 30 April 2009; 2009 figures have regard to all claims processed up to and including 30 April 2010.
- Rate per 1,000 total population.

In each year, the vast majority of Better Access consumers (more than 85%) received at least one Better Access service from a GP. This is consistent with the functions of the GP mental health treatment plan and review item numbers (2710^b and 2713, respectively) as gateways to further Better Access services. Focussed Psychological Strategies services provided by general psychologists had the next highest uptake rate; just under one third of Better Access consumers received one or more of these services in each year. These were followed by uptake rates for Psychological Therapies services provided by clinical psychologists, then Consultant Psychiatrist services (see Table 4).

Table 4: Persons receiving Medicare Benefits Schedule-subsidised *Better Access* services by provider type, 2007, 2008 and 2009, Component B¹

| Provider type | 2007 ² | | | 2008 ² | | | 2009 ² | | |
|-------------------------|-------------------|--------------|-------------------------------|-------------------|--------------|-------------------------------|-------------------|--------------|-------------------------------|
| | N persons | % of persons | Rate (per 1,000) ³ | N persons | % of persons | Rate (per 1,000) ³ | N persons | % of persons | Rate (per 1,000) ³ |
| General Practitioner | 618,867 | 87.1 | 29.5 | 817,738 | 85.9 | 38.3 | 971,836 | 86.0 | 45.4 |
| Consultant psychiatrist | 87,947 | 12.4 | 4.2 | 93,736 | 9.9 | 4.4 | 100,434 | 8.9 | 4.7 |
| Clinical psychologist | 98,612 | 13.9 | 4.7 | 151,587 | 15.9 | 7.1 | 189,418 | 16.8 | 8.9 |
| General psychologist | 213,963 | 30.1 | 10.2 | 289,785 | 30.5 | 13.6 | 348,417 | 30.8 | 16.4 |
| Occupational therapist | 2,011 | 0.3 | 0.1 | 3,701 | 0.4 | 0.2 | 5,103 | 0.5 | 0.2 |
| Social worker | 10,918 | 1.5 | 0.5 | 20,157 | 2.1 | 1.0 | 28,276 | 2.5 | 1.3 |

- The sum of persons receiving services under each item group will be greater than for all Better Access items because a person may receive services from more than one type of provider.
- 2007 and 2008 figures have regard to all claims processed up to and including 30 April 2009; 2009 figures have regard to all claims processed up to and including 30 April 2010.

^b And, from 1 January 2010, MBS item 2702.

3. Rate per 1,000 total population.

Component B also explored the annual costs associated with Better Access services. Table 5 shows that almost than 2.7 million Better Access services were provided in 2007. This increased to 3.8 million services in 2008 and to more than 4.6 million in 2009. The total cost of these services to government, in terms of benefits paid, increased from \$288.9 million in 2007 to \$389.4 million in 2008, and to \$478.1 million in 2009.

Table 5 also shows that more than half of Better Access services delivered were bulk-billed. The average co-payment was around \$35. The proportion of services that involved a co-payment and the average co-payment varied considerably according to the type of provider who delivered the services. For example, in 2009, only 7% of services delivered under the GP items involved a co-payment by the consumer, whereas up to two thirds of the services delivered under the Consultant Psychiatrist (64%), Psychological Therapy Services (65%) and Focussed Psychological Strategies (57%) items did so. One factor that may account for the lower rates of bulk-billing rates for allied health providers, compared to GPs, relates to the types of MBS items being claimed. Component B found that the overwhelming majority of allied health services provided are long (i.e., 50+ minute) consultations.

Table 5: MBS-subsidised Better Access services received, bulk-billing rate, fees charges, benefits paid and average co-payment, by Better Access item group, 2007-2009, Component B

| | Total services | | Bulk-billed services | Fees charged ² | | Benefits paid ² | | Services with co-payments | | Total patients |
|-------------------------|----------------|-----------|----------------------|---------------------------|-------------|----------------------------|------|---------------------------|--------------------------------------|----------------|
| | N | N | | % | \$ | \$ | N | % | Average co-payment (\$) ⁴ | N |
| 2007¹ | | | | | | | | | | |
| GP items ³ | 1,012,497 | 925,910 | 91.4 | 119,225,281 | 117,636,222 | 86,587 | 8.6 | 18.35 | 618,867 | |
| CP items ³ | 94,590 | 30,231 | 32.0 | 25,901,960 | 21,222,543 | 64,359 | 68.0 | 72.71 | 87,947 | |
| PTS items ³ | 507,367 | 136,073 | 26.8 | 71,707,903 | 60,739,728 | 371,294 | 73.2 | 29.54 | 98,612 | |
| FPS items ³ | 1,078,995 | 351,413 | 32.6 | 114,779,148 | 89,272,270 | 727,582 | 67.4 | 35.06 | 226,169 | |
| Total | 2,693,449 | 1,443,627 | 53.6 | 331,614,292 | 288,870,763 | 1,249,822 | 46.4 | 34.20 | 710,840 | |
| 2008¹ | | | | | | | | | | |
| GP items ³ | 1,375,025 | 1,269,689 | 92.3 | 152,526,591 | 150,519,438 | 105,336 | 7.7 | 19.05 | 817,738 | |
| CP items ³ | 101,678 | 34,437 | 33.9 | 27,812,365 | 22,676,030 | 67,241 | 66.1 | 76.39 | 93,736 | |
| PTS items ³ | 785,174 | 250,397 | 31.9 | 108,649,361 | 92,264,952 | 534,777 | 68.1 | 30.64 | 151,587 | |
| FPS items ³ | 1,524,723 | 584,050 | 38.3 | 157,551,394 | 123,987,143 | 940,673 | 61.7 | 35.68 | 312,035 | |
| Total | 3,786,600 | 2,138,573 | 56.5 | 446,539,711 | 389,447,563 | 1,648,027 | 43.5 | 34.64 | 951,454 | |
| 2009¹ | | | | | | | | | | |
| GP items ³ | 1,659,534 | 1,538,270 | 92.7 | 182,427,744 | 179,971,434 | 121,264 | 7.3 | 20.26 | 971,836 | |
| CP items ³ | 109,734 | 39,846 | 36.3 | 30,529,663 | 24,816,904 | 69,888 | 63.7 | 81.74 | 100,434 | |
| PTS items ³ | 1,000,129 | 345,693 | 34.6 | 139,410,904 | 118,370,909 | 654,436 | 65.4 | 32.15 | 189,418 | |
| FPS items ³ | 1,894,584 | 807,337 | 42.6 | 194,849,261 | 154,976,465 | 1,087,247 | 57.4 | 36.67 | 379,284 | |
| Total | 4,663,981 | 2,731,146 | 58.6 | 547,217,572 | 478,135,712 | 1,932,835 | 41.4 | 35.74 | 1,130,384 | |

1. 2007 and 2008 figures have regard to all claims processed up to and including 30 April 2009; 2009 figures have regard to all claims processed up to and including 30 April 2010.
2. Fees charged, benefits paid, and average copayments are expressed in 2009 dollars.
3. GP, General practitioner; CP, Consultant Psychiatry; PTS Psychological Therapy Services; FPS, Focussed Psychological Strategies.
4. ^a Only services for which the consumer contributed a co-payment are included in the calculation of the average co-payment.

The average co-payment was lowest for GP items (\$20 in 2009), somewhat higher for Psychological Therapy Services items (\$32) and Focussed Psychological Strategies items (\$37), and highest for Consultant psychiatrist items (\$82). For services requiring a co-payment, the average co-payment increased between 2007 and 2009 by 4.5%. However, the percentage of services involving a co-payment decreased by 10.8% over the same period. This pattern was evident across all item groups, regardless of provider.

Separate analyses of service-level Medicare data conducted for the Post-Implementation Review of Better Access¹⁸ and the Australian Institute of Health and Welfare’s annual reports on mental health services^{19 20} have also shown increasing levels of Better Access service provision over time. So too have independent analyses conducted by other researchers.²¹⁻²⁶

1b. Has Better Access increased the treatment rates of people with mental disorders?

In answering this question, we need to monitor trends in the overall treatment rate for people with mental disorders in Australia since the implementation of Better Access. In order to estimate the proportion of Australians with mental disorders who have received mental health treatment each year, we need to know:

1. how many Australians had a mental disorder in each year and
2. the number of these persons who were treated in each year.

The major challenge in obtaining these estimates is the absence of a single data source that can directly address the issue.

The 1997 and 2007 National Surveys of Mental Health and Wellbeing can examine changes in the rates and patterns of mental health treatment over time because each survey collected information about individuals’ mental health status and their use of a diverse range of health services. Previously published analyses of data from these surveys (see Table 6) suggest that service use rates for common mental disorders (that is, affective, anxiety and substance use disorders) remained relatively stable over the 1997 to 2007 period, a finding that was counter to expectation.^{12 13 16}

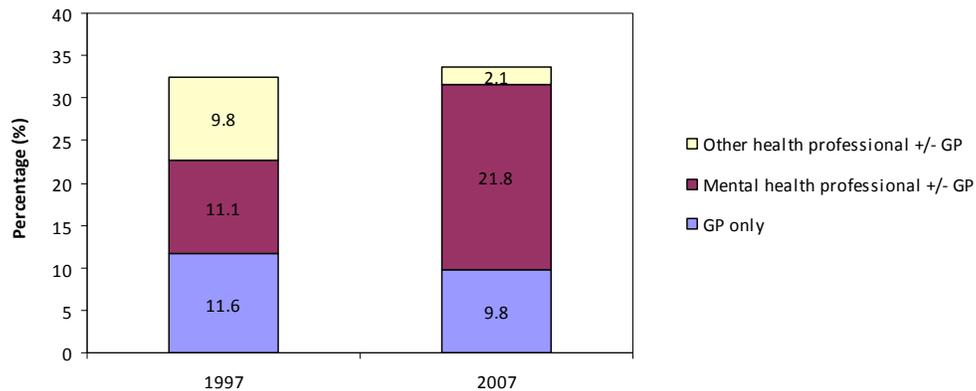
Table 6: Proportion of people with a 12-month mental disorder who received services for a mental health problem, 1997 and 2007 National Survey of Mental Health and Wellbeing

| Disorder class | 1997 NSMHWB | 2007 NSMHWB ³ |
|--|-------------------------|--------------------------|
| 12-month ICD-10 affective disorder | 60.4 ¹ | 58.6 |
| 12-month ICD-10 anxiety disorder | 45.2 ¹ | 37.8 |
| 12-month ICD-10 substance use disorder | 27.9 ¹ | 24.0 |
| Any 12-month ICD-10 disorder | 38.0² | 34.9 |

1. Parslow and Jorm, 2000
2. Australian Bureau of Statistics, 1998
3. Burgess et al, 2009

Component F used National Survey of Mental Health and Wellbeing data to examine whether the use of different types of providers for mental health problems changed between 1997 and 2007.¹⁰ These showed a shift towards greater use of mental health providers. Figure 1 shows that, in 2007, the proportion of people with a 12-month mental disorder who sought treatment from a mental health professional (psychiatrists, psychologists and other mental health professionals) doubled, while the proportion who sought treatment from a GP alone or from another health professional decreased.

Figure 1: Proportion of people with a 12-month disorder who used services for a mental health problem, 1997 and 2007 National Survey of Mental Health and Wellbeing, Component F



These analyses suggest that, between the two surveys, access to specialised mental health care for people with mental disorders had improved. This may reflect the combined early impact of the Better Access program in its first year (introduced November 2006), and its precursor, the Better Outcomes in Mental Health Care program that was more modest in financial investment and population coverage.^c

The National Survey of Mental Health and Wellbeing has two major limitations that preclude its use in estimating the impact of Better Access on rates of treatment of mental disorders. The first is that the 2007 survey was conducted between August and December 2007, and therefore does not capture the first full year operation of Better Access for all respondents. Nor can it provide any information on the impact of Better Access in the years following its initial establishment in 2006-07. The second limitation is that the survey data do not provide complete coverage of the Australian population. Specifically, the 2007 survey did not sample Australians who were younger than 16 years of age or older than 85 years of age. In addition, the scope of the survey was restricted to those living in households. It therefore excluded elderly people in hospitals and aged care facilities with mental disorders, and others with mental disorders living in non-household residential establishments.

To overcome the limitations in the epidemiological data, the Department of Health and Ageing conducted a modelling exercise using routinely available data to estimate the change in treatment rates between 2007 and 2010¹⁷. This model used administrative data on health service utilisation collected by the Commonwealth and states and territories to answer the question: *What percentage of Australians with a current mental illness can be estimated to have accessed a health service for assistance with their illness?*

Details of this modelling were provided to the consultants for inclusion in this report. The consultants reviewed the methodology and key assumptions of the modelling and undertook additional analysis to assess the effects of uncertainty in key parameters and assumptions on the estimates. The purpose of the uncertainty modelling was to assess the extent to which apparent increases in the proportion of persons with mental disorders who receive mental health treatment may be due to sampling error or uncertainty in key parameters used in the Department's model. The details of this work are described in Appendix 2.

^c This program delivers similar services to those offered through Better Access, but does so through projects run by Divisions of General Practice

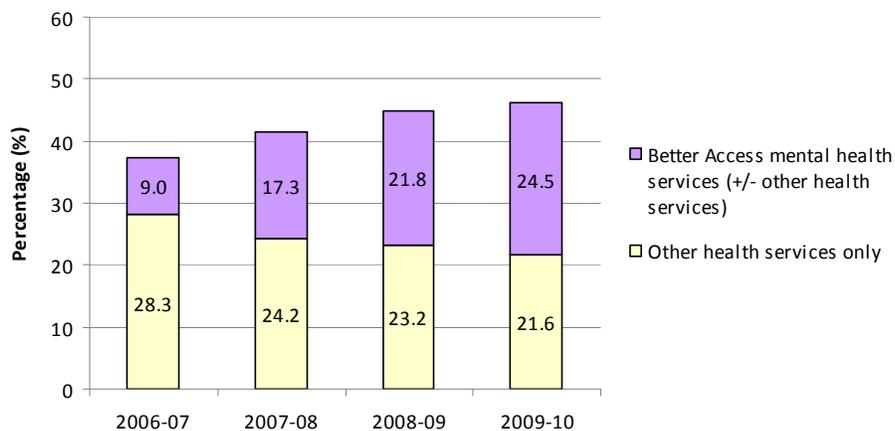
The results of the uncertainty modelling are summarized in Table 7 below. There are three key findings. First, the estimated proportion of persons with a current mental illness who received treatment increased steadily each year from 37.4% in 2006-2007 to 46.1% in 2009-2010, an overall increase of 8.7%. Second, the 95% confidence intervals indicate considerable uncertainty around each of these estimates. They generally fell within plus or minus 3.9% of the mean estimate. For example, in 2006-2007, the 95% uncertainty interval around the estimate of 37.4% ranged between 33.9% and 40.8% (a range of 6.9%). Third, the intervals around the best estimate for each year did not overlap for 2007-2008 and 2008-2009 with the best estimate in the year before. This was not the case for 2009-2010. This pattern of results indicates that the increase between 2006-2007 and 2008-2009 in the percentage persons with a mental disorder who received treatment was unlikely to be due to chance variations in the data. We can be less confident about the smaller increase between the last two years of the period, suggesting a possible slowing in the percentage treated in the most recent period. With this exception, overall, there has been a significant increase in the proportion of persons with a mental disorder who receive mental health treatment for that disorder in the past year.

Table 7: Percentage of persons with a mental disorder treated, results of uncertainty modelling

| Year | Mean | 95% confidence interval |
|---------|------|-------------------------|
| 2006-07 | 37.4 | 35.0 – 39.6 |
| 2007-08 | 41.5 | 39.7 – 43.7 |
| 2008-09 | 45.0 | 42.7 – 47.3 |
| 2009-10 | 46.1 | 43.8 – 48.4 |

The Better Access program appears to be the sole driver of increased treatment rates for mental illness. Figure 2 shows the contribution of Better Access persons treated to overall treatment rates, as estimated by the Department of Health Ageing model. The percentage of persons with a current mental disorder who were treated using Better Access mental health services (alone or in addition to other health services) rose from 9.0% in 2006-07 to 25.4% in 2009-10. Expressed another way, in 2006-07 Better Access persons treated represented one-quarter (24%) of all persons treated. This increased in successive years to 42% in 2007-08, 49% in 2008-09. In 2009-10 Better Access persons treated represented more than half (53%) of all persons treated.

Figure 2: Percentage of persons with mental disorders in the total Australian population treated using Better Access mental health services and other health services, 2006-07 to 2009-10



There are currently no nationally agreed targets for treatment coverage (i.e. the proportion of persons with a mental disorder who ideally should be treated). Expert opinion suggests that an attainable level of coverage with good quality treatment may lie between 60% and 67%.⁴¹⁻⁴³ Judged against these targets, the Department of Health and Ageing modelling suggests that Australia's mental health reforms have made significant progress in closing the gap between current and desirable treatment rates, but that there remains some way to go. In saying this, it is acknowledged however that just seeing a practitioner does not guarantee that good quality treatment has been provided. Although target setting is a separate exercise, information about treatment coverage needs to be supplemented with information about the extent to which treatment provided represents good value for money.

1c. Has Better Access reached groups who are traditionally disadvantaged in their access to mental health care and, if so, has the rate of Better Access uptake improved over time for these groups?

The summative evaluation was not able to assess this question for all groups who are traditionally disadvantaged in their access to mental health care, because no data were available for some (e.g., people from culturally and linguistically diverse backgrounds, Aboriginal and Torres Strait Islander people). It was, however, able to consider access for young people and older people, people in rural and remote areas, and people in areas of high socio-economic disadvantage.

Component B explored the uptake of Better Access items according to the socio-demographic characteristics available in the Medicare Benefits Schedule data, namely, age, gender, geographical location and socio-economic disadvantage. Table 8 summarises the rates of Better Access uptake by socio-demographic characteristics in each of 2007, 2008 and 2009, and the percentage change in rates between years.

Lower rates of uptake were found among young people aged less than 15 years and older people aged 65 or more compared to the middle age groups. However, the relative growth in uptake between 2007 and 2009 was considerably greater for young people under 15 years (96.1%) than for all other age groups, followed by those aged 65 years and over (61.6%).

Additional analyses showed that young people also had the lowest uptake of the GP and Consultant Psychiatry items and the second lowest uptake of Psychological Therapy Services and Focussed Psychological Strategies items (older people having the lowest uptake of the two latter item groups). However, rates of growth between 2007 and 2009 were strongest among young people for the GP Mental Health Treatment (96.3%), Psychological Therapy (121.4%) and Focussed Psychological Strategies (104.9%) items. Growth was more modest (but similar to all other age groups) for the Consultant Psychiatrist (10.8%) items.

Table 8 also shows that uptake rates varied according to geographic region. They were somewhat lower for people residing in capital cities (53.7 per 1,000 population in 2009) than for those in other metropolitan centres and rural centres (59.0 and 57.6 persons per 1,000 in 2009, respectively). Compared to people living in capital cities, uptake rates were approximately 12% lower for people in other rural areas (47.3 per 1,000 in 2009) and approximately 60% lower for people in remote areas (21.5 per 1,000 in 2009). Additional analyses showed that this pattern of lower uptake for people in remote areas was consistent, regardless of item group. However, relative growth in uptake between 2007 and 2009 was greatest for people in remote areas.

With respect to socio-economic disadvantage, uptake rates were approximately 10% lower for people living in the most disadvantaged areas (48.5 persons per 1,000 population in 2009) than for people living in relatively more advantaged areas (between 52.4 and 53.6 persons per 1,000 population in 2009). However, relative growth in uptake between 2007 and 2009 was highest for people in the most disadvantaged areas. Additional analyses showed that these patterns were generally consistent across all item groups.

Table 8: Rates and percentage change in rates of use of any Medicare Benefits Schedule-subsidised Better Access services by age, gender, geographical region and socio-economic disadvantage for 2007, 2008 and 2009, Component B

| | Rate (per 1,000) ³ | | | Percentage change | | |
|--|-------------------------------|-------------------|-------------------|------------------------|------------------------|------------------------|
| | 2007 ¹ | 2008 ¹ | 2009 ¹ | 2007-2008 ¹ | 2008-2009 ¹ | 2007-2009 ¹ |
| Age group | | | | | | |
| 0-14 years | 10.1 | 14.8 | 19.7 | 47.7 | 32.8 | 96.1 |
| 15-24 years | 35.9 | 47.3 | 57.3 | 31.7 | 21.2 | 59.5 |
| 25-34 years | 50.6 | 65.2 | 75.2 | 28.7 | 15.5 | 48.6 |
| 35-44 years | 52.3 | 68.5 | 80.0 | 30.9 | 16.8 | 52.9 |
| 45-54 years | 44.1 | 57.5 | 67.4 | 30.6 | 17.1 | 52.9 |
| 55-64 years | 33.2 | 43.6 | 51.8 | 31.2 | 18.9 | 56.0 |
| 65+ years | 17.3 | 23.0 | 27.9 | 33.3 | 21.3 | 61.6 |
| Gender | | | | | | |
| Male | 24.8 | 32.7 | 39.4 | 31.7 | 20.6 | 58.9 |
| Female | 42.7 | 56.3 | 66.2 | 31.6 | 17.7 | 54.9 |
| Region^{2,4} | | | | | | |
| Capital cities | 35.2 | 45.8 | 53.7 | 30.2 | 17.3 | 52.7 |
| Other metropolitan centres | 36.7 | 48.3 | 59.0 | 31.6 | 22.1 | 60.7 |
| Rural centres | 35.0 | 47.5 | 57.6 | 35.6 | 21.4 | 64.6 |
| Other rural areas | 28.5 | 38.9 | 47.3 | 36.4 | 21.5 | 65.8 |
| Remote areas | 12.7 | 16.6 | 21.5 | 30.6 | 29.5 | 69.2 |
| Socio-economic disadvantage^{2,5} | | | | | | |
| Quintile 5 (Least) | 36.1 | 46.1 | 53.4 | 27.7 | 15.8 | 47.9 |
| Quintile 4 | 33.6 | 44.1 | 52.7 | 31.0 | 19.7 | 56.8 |
| Quintile 3 | 33.4 | 44.1 | 52.4 | 31.9 | 18.7 | 56.6 |
| Quintile 2 | 33.2 | 44.6 | 53.6 | 34.2 | 20.1 | 61.2 |
| Quintile 1 (Most) | 29.4 | 40.0 | 48.5 | 36.0 | 21.2 | 64.8 |
| All Better Access items | 33.8 | 44.5 | 52.8 | 33.6 | 18.7 | 58.6 |

1. 2007 and 2008 figures have regard to all claims processed up to and including 30 April 2009; 2009 figures have regard to all claims processed up to and including 30 April 2010.
2. Region based on Rural, Remote and Metropolitan Areas (RRMA) classification. Socio-economic disadvantage based on Index of Relative Socioeconomic Disadvantage (IRSD) classification.
3. Rates for gender, region and socio-economic disadvantage are age-standardised; Rates for age group are crude.
4. 2007, 1 case excluded due to missing data on RRMA.
5. Approximately 1% of cases excluded due to missing IRSD quintile data.

These findings are corroborated by analyses of service-level Medicare data conducted for the Post-Implementation Review of Better Access¹⁸ and the Australian Institute of Health and Welfare's annual reports on mental health services,^{19 20} and by independent analyses conducted by Russell.²¹⁻²³

A major limitation of the above analyses is that they did not control for the clinical characteristics of Better Access consumers, usually because they relied solely on Medicare data. They therefore cannot tell us whether services are being used by those who have a clinical need for them. Component B attempted to overcome this limitation by undertaking an ecological analysis that drew together Medicare Benefits Schedule data and data from the 2007 National Survey of Mental Health and Wellbeing. Data from both sources were aggregated at the level of Divisions

of General Practice. Levels of mental health treatment need^d in areas defined by the boundaries of Divisions of General Practice were modelled using the survey data. Analyses assessed whether Better Access services (total services and allied health services used per 1,000 population in 2007) were distributed across Divisions according to need. These analyses indicated that there were higher levels of Better Access service use in Divisions with higher levels of mental health need. Higher levels of Better Access use were also found in Divisions with higher levels of GP supply and Divisions in Victorian Divisions. Lower levels of Better Access use were found in Divisions with relatively more people in the most socioeconomically disadvantaged areas and Divisions with more people living in remote locations. Models including these factors accounted for over half the variation in total use of Better Access services (54.7%) and use of allied health Better Access services (51.0%).

An independent study by Harris et al used data from the 2007 National Survey of Mental Health and Wellbeing to explore the use of Medicare-subsidised allied health services among people with a need for mental health treatment.¹⁴ Survey respondents who reported using allied health services subsidised by Medicare in the past year (regardless of other mental health service use) were deemed to be Better Access allied health consumers^e. Respondents who reported symptoms consistent with a 12-month ICD-10 diagnosis of affective or anxiety disorder were divided into three mutually exclusive groups based on their reported use of services for mental health problems in the past year: Better Access allied health service consumers; people who had used other services; and people who had not used any services. Among people with a 12-month affective or anxiety disorder, Better Access service use, as compared to other service use or no service use, was predicted by clinical factors (i.e., more severe disorder, having an affective disorder) but not by urbanicity (i.e., living in a major urban area versus a rural or remote area), level of socio-economic disadvantage (i.e. living in areas of less disadvantage), or other socio-demographic factors (such as age, gender, education or employment status).

The latter two modelling exercises provide complementary information on equity of access to Better Access. They both show that mental health need is a key determinant of Better Access service use. The ecological study undertaken in Component B (which used aggregated data and examined Better Access use in the total population) suggested there were some geographical inequities. These probably reflect the lower availability of health care professionals in remote and socio-economically disadvantaged areas. The Harris et al study (which used individual-level data on the use of Better Access services within a population defined as having current need) suggested that the use of Better Access services is primarily driven by having more severe and complex needs, rather than by demographic or socio-economic factors.

Data from the BEACH program also suggest that when mental health need is taken into account differences on other variables diminish.^{27 28} Restricting the analysis to encounters where the patient presented with a mental health problem, Britt and colleagues showed that Better Access GP item numbers were equally as likely to be used for in GP encounters in major cities and outside major cities, and in areas of socio-economic advantage and disadvantage. People from outside major cities were just as likely as their counterparts from major cities to be referred to a psychologist (both before and after the introduction of Better Access). People in socio-

^d Mental health need was indicated by the presence of any one of the following: an ICD-10 12-month affective, anxiety or substance use disorder; 12-month symptoms (but no ICD-10 lifetime disorder); any psychiatric hospitalisation in the past 12 months; high or very high level of psychological distress on the K10 measure; 7 or more days out of role; or any suicidality in the past 12 months.

^e This assumption was justified on the basis that Medicare subsidised services claimed by psychologists, social workers and occupational therapists for non-Better Access mental health and other services constituted only 2% of all Medicare-subsidised mental health services provided by these providers in 2007.

economically disadvantaged areas were less likely than those in advantaged areas to be referred to a psychologist, although the differential was reduced after the introduction of Better Access.

A study of uptake of Better Access item numbers by women²⁹ showed somewhat different results with respect to socioeconomic factors. Byles et al compared the characteristics of four groups: women who used a Better Access MBS item; women who did not use a Better Access MBS item but had a recent mental health condition; women who did not use a Better Access MBS item but had a past mental health condition; and women who did not use a Better Access MBS item and did not have a mental health condition. They found that women who did not use a Better Access MBS item but had a recent mental health condition included more women who reported difficulty managing on their income and fewer women with post-school qualifications. However they did not find any differences between the groups in terms of area of residence.

As well as considering the relative level of access to Better Access by particular socio-demographic groups, Component B also profiled the costs of Better Access services according to consumers' socio-demographic characteristics. Table 9 summarises these data for 2009; patterns were similar for 2007 and 2008. The table shows that there were some variations in average co-payments according to socio-demographic characteristics. Notably, average co-payments in 2009 were: lower for people aged 65 years or more (\$33) than for all younger age groups; higher among people in remote areas (\$37) and people in capital cities (\$37) than those in other regions (\$31-\$33). The average co-payment decreased as level of relative socio-economic disadvantage increased (from \$38 to \$33).

Additional analyses showed that there were also some variations in average co-payments according to socio-demographic characteristics and provider type. Most notably, average co-payments in 2009 were: lowest among people aged 65 years and over for GP, Psychological Therapy Services and Focussed Psychological Strategies items and lowest for young people aged less than 15 years for Consultant Psychiatrist items; highest among people in remote locations for GP, Psychological Therapy Services and Consultant Psychiatrist items but in the middle of the range for Focussed Psychological Strategies; and lowest among people in areas of greatest socio-economic disadvantage regardless of item group.

Table 9: MBS-subsidised Better Access services received, bulk-billing rate, fees charges, benefits paid and average co-payment, by gender, age, geographical region and socio-economic disadvantage, 2009¹

| | Total services | Bulk-billed services | | Fees charged ² | Benefits paid ² | Services with co-payments ² | | Total patients | |
|--|----------------|----------------------|------|---------------------------|----------------------------|--|------|--------------------------------------|---------|
| | N | N | % | \$ | \$ | N | % | Average co-payment (\$) ³ | N |
| Age group | | | | | | | | | |
| 0-14 years | 355,901 | 164,877 | 46.3 | 44,834,383 | 38,091,086 | 191,024 | 53.7 | 35.30 | 81,336 |
| 15-24 years | 655,158 | 389,660 | 59.5 | 79,077,952 | 69,325,461 | 265,498 | 40.5 | 36.73 | 171,876 |
| 25-34 years | 936,374 | 523,683 | 55.9 | 111,830,884 | 96,094,075 | 412,691 | 44.1 | 38.13 | 224,648 |
| 35-44 years | 1,085,370 | 615,694 | 56.7 | 127,170,126 | 110,739,412 | 469,676 | 43.3 | 34.98 | 249,183 |
| 45-54 years | 862,464 | 518,922 | 60.2 | 98,623,205 | 86,768,281 | 343,542 | 39.8 | 34.51 | 199,434 |
| 55-64 years | 518,294 | 330,161 | 63.7 | 58,285,606 | 51,790,992 | 188,133 | 36.3 | 34.52 | 124,944 |
| 65+ years | 250,420 | 188,149 | 75.1 | 27,395,417 | 25,326,405 | 62,271 | 24.9 | 33.23 | 78,963 |
| Gender | | | | | | | | | |
| Male | 1,643,579 | 992,585 | 60.4 | 195,046,140 | 170,876,697 | 650,994 | 39.6 | 37.13 | 419,561 |
| Female | 3,020,402 | 1,738,561 | 57.6 | 352,171,432 | 307,259,015 | 1,281,841 | 42.4 | 35.04 | 710,823 |
| Region^a | | | | | | | | | |
| Capital cities | 3,220,794 | 1,746,665 | 54.2 | 387,705,576 | 333,310,309 | 1,474,129 | 45.8 | 36.90 | 740,953 |
| Other metro | 406,611 | 268,669 | 66.1 | 45,903,547 | 41,348,924 | 137,942 | 33.9 | 33.02 | 101,922 |
| Rural centres | 577,181 | 392,727 | 68.0 | 63,045,538 | 57,295,844 | 184,454 | 32.0 | 31.17 | 155,054 |
| Other rural areas | 427,534 | 300,178 | 70.2 | 46,983,183 | 42,935,883 | 127,356 | 29.8 | 31.78 | 120,434 |
| Remote areas | 31,828 | 22,891 | 71.9 | 3,575,450 | 3,241,381 | 8,937 | 28.1 | 37.38 | 12,012 |
| Socio-economic disadvantage^b | | | | | | | | | |
| Quintile 5 (Least) | 1,385,364 | 598,025 | 43.2 | 176,843,753 | 146,864,097 | 787,339 | 56.8 | 38.08 | 298,207 |
| Quintile 4 | 1,040,198 | 586,625 | 56.4 | 122,380,008 | 106,271,473 | 453,573 | 43.6 | 35.51 | 245,822 |
| Quintile 3 | 905,743 | 578,173 | 63.8 | 102,605,607 | 91,598,973 | 327,570 | 36.2 | 33.60 | 228,413 |
| Quintile 2 | 732,988 | 512,346 | 69.9 | 80,322,694 | 73,198,042 | 220,642 | 30.1 | 32.29 | 195,517 |
| Quintile 1 (Most) | 547,063 | 428,338 | 78.3 | 58,516,903 | 54,639,090 | 118,725 | 21.7 | 32.66 | 149,683 |

1. 2009 figures have regard to all claims processed up to and including 30 April 2010.
2. Fees charged, benefits paid, and average copayments are expressed in 2009 dollars.
3. Only services for which the consumer contributed a co-payment are included in the calculation of the average co-payment.

1d. Has Better Access reached new consumers?

Several sources of data shed light on this question. The most direct evidence comes from Component A.³ Consumers who were recruited to the study by clinical psychologists (n=289), registered psychologists (n=317) and GPs (n=277), were asked whether they had previously received mental health care. Table 10 shows that more than half of the consumers recruited by clinical psychologists and registered psychologists (58% and 51%, respectively) had no previous history of mental health care. The same was true for a sizeable proportion of the consumers recruited by GPs (42%). This suggests that around half of all Better Access consumers may be “new”, not only to Better Access but to mental health care more generally.

Table 10: Previous history of mental health care among consumers who participated in Component A¹

| | No previous history of mental health care | | Previous history of mental health care | | Unknown | |
|---|---|-----|--|-----|---------|----|
| | N | % | N | % | N | % |
| Consumers recruited by clinical psychologists (n=289) | 168 | 58% | 109 | 38% | 11 | 4% |
| Consumers recruited by registered psychologists (n=317) | 162 | 52% | 127 | 41% | 20 | 6% |
| Consumers recruited by GPs (n=277) ² | 113 | 42% | 149 | 56% | 4 | 2% |

1. Received care through Better Access between 1 Oct 2009 and 31 Oct 2010.
2. Consumers recruited by GPs may have received treatment from the GP in isolation or may have been referred to an allied health professional for further care.

Medicare claims data were used in Component B to address a related question: to what extent has Better Access attracted first-time consumers of these services in each successive year of its operation?⁵ These analyses, summarised in Table 11, revealed that, of the 953,161 consumers who had received at least one Better Access service in 2008, more than two-thirds (68.0% or 648,465 consumers) were first-time Better Access consumers. In 2009, more than half (57.0% or 644,295 consumers) of the 1,130,384 Better Access consumers were first-time consumers. The percentage of first-time consumers varied by provider type. It was greatest among consumers using Better Access psychiatrist items, and lowest among consumers using Better Access GP items. The 2710 Mental Health Treatment Plan item potentially provides the best estimate of new Better Access consumers, as it is the “gateway” to subsequent Better Access services for the vast majority of consumers. In 2008, 87.2% of consumers received a Mental Health Treatment Plan for the first time. In 2009, the figure was 77.1%. It is acknowledged, however, that the approach taken here uses a limited definition of a “new” consumer because it is based on Medicare Benefits Schedule Better Access item data only. It may have included people who, although new to Better Access, are existing consumers of other parts of the mental health system.

Data from the study of uptake of Better Access item numbers by women also suggest that the initiative has reached “new” consumers.²⁹ Specifically, this study found that 93% of women who used Better Access items had not previously seen a counsellor, psychologist or social worker.

Data from the BEACH program provide a contrary view. BEACH data showed that although proportion of encounters at which depression was managed by GPs increased significantly from 3.5/100 in 1998-99 to 4.0/100 in 2007-08, the management rate of “new” cases of depression remained constant (0.7/100 encounters in 1998-99 to 0.6/100 encounters in 2007-08). There was also no change in the management rate of “new” cases of anxiety or substance use disorders.^{27 28}

Two other studies have examined how many consumers of Better Access services provided by allied health professionals have previously used these same provider groups. The Australian Psychological Society’s surveys found that, on average, participating psychologists reported that 70% of their Better Access consumers had not previously consulted a psychologist.^{30 31} Harris et al’s analyses of population-level data from the 2007 National Survey of Mental Health and Wellbeing estimated that 62% of people who used Better Access allied health services in 2007 had not previously used allied health services for mental health care.¹⁴

Table 11: Number and percentage of first-time Better Access consumers in 2008 and 2009 derived from Medicare claims data, Component B¹

| Item group | Received services in 2008 | | | Received services in 2009 | | |
|----------------------------|---------------------------|--|--|---------------------------|--|--|
| | Total N | N received services for the first time in 2008 | % received services for the first time in 2008 | Total N | N received services for the first time in 2009 | % received services for the first time in 2009 |
| Any Better Access item | 953,161 | 648,465 | 68.0% | 1,130,384 | 644,295 | 57.0% |
| GP | 818,434 | 597,996 | 73.1% | 971,713 | 604,319 | 62.2% |
| GP item 2710 | 555,479 | 484,272 | 87.2% | 638,756 | 492,339 | 77.1% |
| Consultant psychiatrist | 94,398 | 86,977 | 92.1% | 100,390 | 87,288 | 86.9% |
| Allied Health Professional | 452,600 | 322,985 | 71.4% | 550,354 | 346,108 | 62.9% |
| Psychologists | 430,928 | 307,822 | 71.4% | 520,588 | 328,750 | 63.1% |
| Clinical Psychologist | 152,721 | 113,376 | 74.2% | 189,418 | 126,778 | 66.9% |
| Registered psychologist | 292,129 | 215,259 | 73.7% | 348,417 | 233,247 | 66.9% |
| Social Workers | 20,319 | 16,164 | 79.6% | 28,276 | 21,078 | 74.5% |
| Occupational Therapists | 3,719 | 2,918 | 78.5% | 5,103 | 3,671 | 71.9% |

1. Data had regard to claims processed up to and including 30 April 2010.

Taken together, these findings strongly suggest that Better Access has reached “new” consumers. Although it is possible that some of these people may have had no need for mental health care in the past. It would seem plausible that a substantial proportion had a prior need but were not able to access care. Better Access would appear to be potentially meeting some of the previously unmet need for mental health care experienced by Australians with common mental disorders.

1e. Has Better Access reached consumers with moderate to severe disorders, or has it predominantly provided care to those with mild symptoms?

As noted above, the Medicare claims data used in Component B only allowed Better Access consumers to be profiled in terms of basic socio-demographic characteristics (see Question 1c, above).⁵ They did not contain information about consumers’ diagnoses or the severity of their disorders. Two alternative sources of data had the capacity to assess these characteristics among consumers of Better Access services.

The first source was Component A³ which collected information about consumers’ diagnoses and levels of psychological distress at the commencement of treatment (that is, at their first session). Table 12 summarises the results. More than 90% of consumers recruited to Component A by clinical psychologists, registered psychologists and GPs had diagnoses of depression and/or anxiety. This compares with 13% of the general population. Around 80% of consumers recruited by each type of provider were experiencing high or very high levels of psychological distress (as assessed by the Kessler 10, or K-10). Again, this is much higher than the 10% observed in the general population.

Table 12: Clinical profiles of consumers who participated in Component A¹

| | | Consumers recruited by clinical psychologists (n=289) ² | | Consumers recruited by registered psychologists (n=317) ² | | Consumers recruited by GPs (n=277) ^{2,3} | |
|---------------------------------|---|--|-----|--|-----|---|-----|
| | | Freq | % | Freq | % | Freq | % |
| Diagnosis | Depression and anxiety ⁴ | 99 | 34% | 121 | 38% | 113 | 41% |
| | Depression without anxiety ⁴ | 105 | 36% | 117 | 37% | 102 | 37% |
| | Anxiety without depression ⁴ | 66 | 23% | 60 | 19% | 38 | 14% |
| | Other ⁵ | 19 | 7% | 19 | 6% | 24 | 9% |
| Pre-treatment K-10 score | 10-15 (Low psychological distress) | 13 | 5% | 8 | 3% | 8 | 3% |
| | 16-21 (Moderate psychological distress) | 37 | 13% | 43 | 14% | 26 | 10% |
| | 22-29 (High psychological distress) | 103 | 36% | 93 | 31% | 81 | 30% |
| | ≥30 (Very high psychological distress) | 133 | 47% | 159 | 53% | 158 | 58% |

1. Received care through Better Access between 1 Oct 2009 and 31 Oct 2010.
2. Consumers recruited by GPs may have received treatment from the GP in isolation or may have been referred to an allied health professional for further care.
3. Cells do not always sum to the total n due to some missing data.
4. With or without alcohol and drug use disorders, psychotic disorders, and/or unexplained somatic disorders.
5. Alcohol and drug use disorders, psychotic disorders, unexplained somatic disorders, and/or unknown or missing diagnoses.

The second source of relevant information was the study by Harris et al which used data from the 2007 National Survey of Mental Health and Wellbeing to explore the use of Medicare-subsidised allied health services.¹⁴ This study found that the vast majority (93.2%) of consumers estimated to have used Better Access allied health services in 2007 had either a 12-month ICD-10 affective, anxiety or substance use disorder (81.7%) or another indicator of treatment need (11.5%)^f.

Byles et al reported similar findings in their study of uptake of Better Access item numbers by participants in the Australian Longitudinal Study on Women's Health.²⁹ They observed that women who used Better Access item numbers tended to have poorer mental health, and that this had often declined prior to use of the item numbers.

Harris et al's study also included information from the 2007 National Survey of Mental Health and Wellbeing about the level of severity, disability and psychological distress among consumers of Better Access allied health service consumers.¹⁴ The study selected people with a 12-month affective or anxiety disorder, and compared the characteristics of those who received Better Access allied health services with those who used other services for a mental health problem, or used no services. Almost half of the Better Access consumer group had a severe disorder (47.6%, as opposed to a mild or moderate disorder), 45.5% reported a high level of disability as measured by the World Health Organization Disability Assessment Schedule (WHO-DAS), 45.9% reported high or very high levels of distress as measured by the Kessler-10 (K-10), and 28.1% had experienced more than seven days out of role in the past 30 days. These proportions were comparable to those for people who used other mental health services (37.8%, 51.9%, 49.9% and 30.1%, respectively). However they were significantly greater than those for people who had not used services on all measures except the WHO-DAS (13.5%, 35.9%, 23.5% and 12.9%, respectively).

Harris et al's study also included information from the National Survey of Mental Health and Wellbeing about the level of severity, disability and psychological distress among consumers of Better Access allied health services.¹⁴ The study selected people with a 12-month affective or anxiety disorder, and compared the characteristics of those who received Better Access allied

^f Other indicators of treatment need were a lifetime ICD-10 disorder, 12-month symptoms (but no lifetime diagnosis) for at least one disorder, or lifetime hospitalisation for a mental health problem.

health services with those who used other services for a mental health problem, or used no services. Around half of the Better Access consumer group had a severe disorder (47.6%, as opposed to a mild or moderate disorder), 45.5% reported a high level of disability as measured by the WHO-DAS, 45.9% reported high or very high levels of distress as measured by the K10, and 28.1% had experienced more than seven days out of role in the past 30 days. These proportions were comparable to those for people who used other mental health services (37.8%, 51.9%, 49.9% and 30.1%, respectively). However they were significantly greater than those for people who had not used services on all measures except the WHO-DAS (13.5%, 35.9%, 23.5% and 12.0%, respectively).

Harris et al also used a multivariate logistic regression model to compare Better Access psychological service users to other mental health service users and non-mental health service users on a comprehensive set of demographic, socio-economic and clinical variables. Severity was one of only two variables that distinguished between the service use groups. Specifically, having a severe disorder and having an affective disorder (either alone or in combination with another disorder, as opposed to an anxiety disorder alone) increased the likelihood of using a Better Access allied health service. There were no variables that distinguished Better Access allied health service users from other service users. That is, Better Access consumers appeared to have more severe and complex disorders than those who did not seek treatment, and were not less severely ill than those seen elsewhere in the mental health service system (e.g., in specialist mental health sector services).

These findings suggest that, as a rule, Better Access consumers are not typically people with mild symptoms. Most have clinically diagnosable disorders – predominantly depression and/or anxiety, but also substance use and other disorders – or have other indicators of treatment need. Most are experiencing significant levels of psychological distress.

Chapter 4: Question 2 – Is Better Access an effective (and cost-effective) model of service delivery?

2a. Is Better Access achieving positive outcomes for consumers?

Better Access appears to be achieving positive outcomes for consumers. The strongest evidence for this comes from Component A of the evaluation.³ As described earlier, Component A followed 883 consumers (289 recruited by clinical psychologists, 317 recruited by registered psychologists and 277 recruited by GPs) and examined the difference between mean pre- and post-treatment scores on standardised outcome measures for consumers with “matched pairs” of pre- and post-treatment scores. Table 13 summarises the findings. Consumers recruited by all three types of providers showed a decline from high or very high levels of psychological distress at the start of treatment to much more moderate levels of psychological distress at the end of treatment, as assessed by the Kessler-10 (K-10). Consumers who were recruited by clinical psychologists and registered psychologists shifted from moderate or severe levels of depression, anxiety and stress to normal or mild levels of these symptoms (as assessed by the Depression Anxiety Stress Scales, or DASS-21).

Table 13: Outcome data for consumers who participated in Component A and had “matched pairs” of pre- and post-treatment scores on standardised measures¹

| | | Pre-treatment mean (s.d.) | Post-treatment mean (s.d.) | Mean difference (s.d.) | P-value |
|---|--------------------------------------|---------------------------|----------------------------|------------------------|---------|
| Consumers recruited by clinical psychologists | K-10 ⁴ (n=193) | 28.63 (7.57) | 19.09 (6.96) | 9.53 (7.84) | 0.000 |
| | DASS_Depression ⁵ (n=205) | 21.02 (11.00) | 9.66 (9.63) | 11.37 (10.92) | 0.000 |
| | DASS_Anxiety ⁶ (n=205) | 14.75 (9.44) | 7.58 (7.32) | 7.17 (8.73) | 0.000 |
| | DASS_Stress ⁷ (n=205) | 22.85 (8.58) | 12.93 (8.48) | 9.93 (9.50) | 0.000 |
| Consumers recruited by registered psychologists | K-10 ⁴ (n=192) | 29.44 (7.33) | 18.86 (7.13) | 10.58 (8.83) | 0.000 |
| | DASS_Depression ⁵ (n=204) | 20.41 (10.58) | 8.96 (8.99) | 11.46 (11.43) | 0.000 |
| | DASS_Anxiety ⁶ (n=204) | 15.34 (9.59) | 6.55 (7.01) | 8.78 (10.09) | 0.000 |
| | DASS_Stress ⁷ (n=204) | 23.91 (9.41) | 12.22 (9.28) | 11.69 (11.01) | 0.000 |
| Consumers recruited by GPs ^{2,3} | K-10 ⁴ (n=177) | 30.89 (7.94) | 22.88 (8.54) | 8.01 (8.72) | 0.000 |

1. Received care through Better Access between 1 Oct 2009 and 31 Oct 2010.
2. Consumers recruited by GPs may have received treatment from the GP in isolation or may have been referred to an allied health professional for further care.
3. The DASS-21 was only collected for consumers recruited by clinical and registered psychologists, and not by consumers recruited by GPs.
4. Standard cut-off scores for levels of psychological distress are as follows: 10-15 (Low); 16-21 (Moderate); 22-29 (High); ≥30 (Very high)
5. Recommended cut-off scores for conventional severity labels are as follows: 0-9 (Normal); 10-13 (Mild); 14-20 (Moderate); 21-27 (Severe); ≥28 (Extremely severe)
6. Recommended cut-off scores for conventional severity levels are as follows: 0-7 (Normal); 8-9 (Mild); 10-14 (Moderate); 15-19 (Severe); ≥20 (Extremely severe)
7. Recommended cut-off scores for conventional severity levels are as follows: 0-14 (Normal); 15-18 (Mild); 19-25 (Moderate); 26-33 (Severe); ≥34 (Extremely severe)

Mackey et al used a similar approach to that of Component A in their own private practice.^{35 36} They followed 525 consumers who were seen by psychologists in a single private practice, and assessed them before and after treatment on the Beck Anxiety Inventory (BAI), Beck Depression Inventory (BDI), Positive and Negative Affect Scale (PANAS), Satisfaction with Life Scale (SWLS), Outcome Rating Scale (ORS), Session Rating Scale (SRS) and Global Assessment of Functioning Scale (GAF). They observed significant changes in average scores on all measures.

Hitch et al.³⁷ conducted a similar, smaller-scale study with 31 consumers who received Better Access care from one occupational therapist. They assessed pre- and post-treatment outcomes using the K-10. These consumers experienced statistically significant improvements, from a mean pre-treatment score of 25.68 (a high level of psychological distress) to a mean post-treatment score of 21.00 (a moderate level of psychological distress). Some caution must be exercised in generalising these findings because of the small sample of consumers seen by a single provider.

The interview and survey data collected in Components A³ and A.2³⁴ provide further evidence that Better Access is achieving positive outcomes for consumers. In total, 936 consumers offered their views to the evaluation (133 recruited by clinical psychologists, 152 recruited by registered psychologists and 121 recruited by GPs in Component A; and 458 recruited by social workers and 72 recruited by occupational therapists in Component A.2). Almost universally, these consumers were satisfied with the clinical care they had received through Better Access. The majority indicated that they had experienced significant improvements in their mental health and their ability to cope with stressful situations. Most attributed these changes, at least in part, to the care they had received through Better Access.

These findings are reinforced by those from the Australian Psychological Society's survey of consumers who received psychological care through Better Access.³⁴ This study sought the views of 2,223 consumers. Ninety per cent of these consumers felt that the treatment they had received had led to "significant" (45%) or "very significant" (45%) improvement.

The findings from Component D support the conclusion that Better Access consumers are experiencing positive outcomes.⁷ Component D involved consultations with more than 1,200 stakeholders (including representatives from professional bodies and peak non-government organisations, individual providers, consumers and carers). Overall, these stakeholders agreed that Better Access has improved outcomes for consumers. Many made comments along these lines during the course of interviews and workshops. A number responded to questions in online surveys that were also informative. For example, 90% of the 529 allied health professionals, GPs, psychiatrists and paediatricians who were asked whether they thought Better Access had improved mental health outcomes for people with anxiety or depressive disorders indicated that they "agreed". Similarly, 41% of the 110 consumers who rated the helpfulness of services they had received from an allied health professional under Better Access reported that the services had made them feel "much better", and another 41% indicated that they had made them feel "somewhat better".

2b. Do some consumers experience better outcomes than others?

Using a series of regression analyses, Component A assessed whether particular variables predicted better outcomes as measured by the K-10.³ The analytic approach assessed the predictive value of a given variable while controlling for all other variables in the particular model, including the initial K-10 score. In the main, socio-demographic factors did not appear to predict outcomes after treatment; equivalent outcomes were achieved whether the consumer was male or female, young or old, or wealthy or struggling financially.

Clinical and treatment variables were generally better predictors of outcome. For consumers recruited by clinical psychologists, registered psychologists and GPs, those with the worst baseline psychological distress (i.e., higher pre-treatment K-10 scores) made the greatest gains. For consumers recruited by clinical psychologists, no other variables predicted outcomes. For consumers recruited by registered psychologists, those who had completed treatment or were still in treatment showed greater gains than those for whom treatment was incomplete (e.g., those who had dropped out of treatment), and those in metropolitan areas showed less improvements than their rural counterparts. For consumers recruited by GPs, those who had six sessions of care experienced better outcomes than those who had more or fewer. Those who had no previous history of mental health care showed greater levels of improvement than those who had received mental health care in the past.

2c. Is Better Access a cost-effective way of delivering primary mental health care?

It was beyond the scope of the summative evaluation to conduct a comprehensive cost-effectiveness analysis of Better Access. However, some comments can be made about whether Better Access appears to provide good value for money. This can be done by comparing the outcomes and costs of care for consumers seen by psychologists in tandem, and making comparisons with recognised standards. Outcomes were taken from Component A, and costs were considered in terms of current Medicare Benefits Schedule costs to government. It is recognised that the perspective and time horizon are limited because they do not take into account broader or longer-term outcomes (e.g., improved social participation) or costs (e.g., other costs to government, costs to consumers or broader societal costs). It is also acknowledged that the focus on services provided by psychologists is limited because it does not allow statements to be made about the value for money of services offered by other providers. We were restricted to this provider group in the current analysis because of our reliance on Component A for outcome data.

Component A indicated that the care provided by both clinical and registered psychologists was associated with positive clinical outcomes.³ As noted in Table 13, above, the mean improvement on the K-10 was 9.53 points for consumers who received care from clinical psychologists and 10.58 points for those who received care from general psychologists. Taking the average of these two estimates, consumers who received care from any psychologist improved by 10.26 points.

Data from Component B showed clinical psychologists most frequently used item number 80010 and registered psychologists item number 80110. Together, these item numbers accounted for more than 90% of sessions of care delivered by these providers.⁵ This pattern of service delivery was also apparent for the samples of clinical and registered psychologists who participated in Component A.³ Item numbers 80010 and 80110 both provide a rebate for 50+ minute consultations provided in psychologists' rooms. The rebates for these item numbers are \$119.80 and \$81.60, respectively. The weighted average rebate for the two item numbers is \$94.33.⁶

Component B also showed that the median number of psychological services per consumer was five.⁵ The full samples of consumers recruited by clinical and registered psychologists in Component A also had a median of five sessions, and those for whom "matched pairs" of outcome data were available had a median of six. Taking the higher figure of six on the grounds that this is the number of sessions for which Medicare coverage is available in the first instance,

⁶ This average is weighted to take into account the fact that, according to Component B, registered psychologists provide approximately twice as many services under item number 80110 as clinical psychologists do under item number 80010.

and multiplying it by the unit costs of the above rebate, the typical cost to government of a package of care from a clinical or registered psychologist is \$566.00.

Since a GP referral is necessary for a consumer to receive care from a psychologist through Better Access, the rebate for a mental health treatment plan (item number 2710, rebate \$163.35) was added to the above costs. It was not appropriate to include the rebate for a mental health treatment review (item number 2712, rebate \$108.90) in all cases; Component B showed that the ratio of people receiving mental health treatment plans relative to people receiving mental health treatment reviews was 4.6:1.⁵ Accordingly, 22% of the rebate (i.e., \$23.96) was added to the cost of the typical package of care from a clinical or registered psychologist. Adding these GP-related costs brings the cost to \$753.31. Taking the above cost and outcome data together, the average cost per one-point improvement on the K-10 was \$73.46 for consumers who were seen by a clinical or registered psychologist.

Andrews et al estimated that optimal treatment for anxiety or depressive disorders would cost about \$1,000 per case in 1997 dollars.⁴⁴ This estimate was based on epidemiological data on the prevalence and burden of these disorders, and on the cost of providing evidence-based interventions. Their costs incorporated Medicare Benefits Schedule schedule fees rather than rebates. Rebates are typically lower (e.g., the rebates for item numbers 80010 and 80110 are 85% of the schedule fee), which brings the cost to government of optimal treatment to \$850 per case in 1997 dollars. This translates to about \$1,100 per case in 2010 after adjusting for changes in the Consumer Price Index. On the basis of these provisional estimates, Better Access care provided by psychologists would appear to represent good value for money for government.

Chapter 5: Question 3 – Has Better Access had an impact on the profile and operation of Australia’s mental health workforce?

3a. To what extent has Better Access had an impact on the distribution of allied health professionals in the public and private mental health sectors?

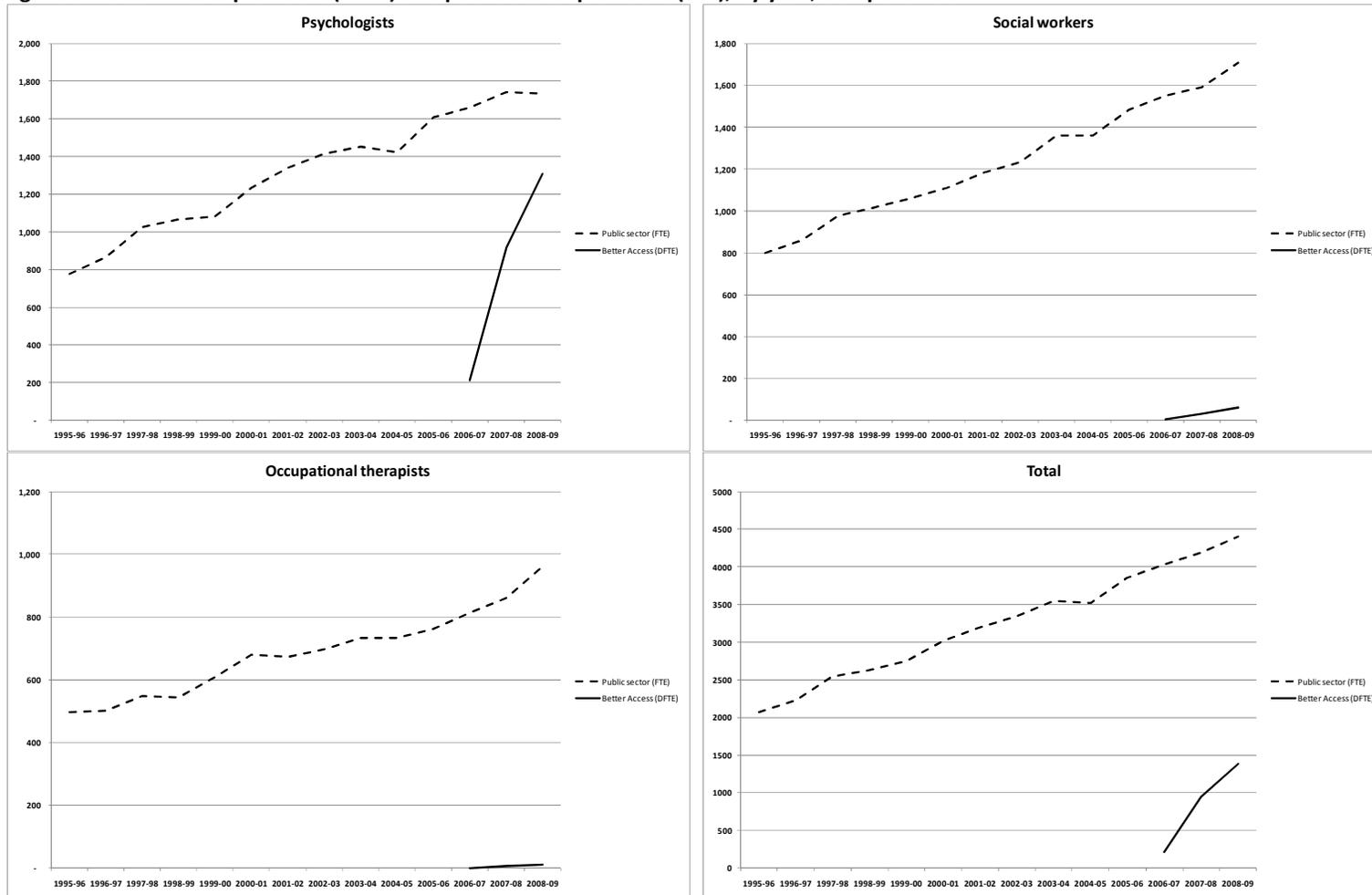
Better Access has made private practice more viable for allied health professionals, and surveys of psychologists and occupational therapists have indicated that these professionals find this opportunity rewarding.³⁰⁻³³ Concerns have been expressed that this may have led to an exodus of these providers from public sector mental health services.

The stakeholder consultations conducted as part of Component D provided some anecdotal evidence on this issue.⁷ Health department officials, representatives of professional bodies, public sector service managers and individual providers indicated that although they had anticipated that Better Access would lead to a significant shift, the observed movement has been quite small. According to these stakeholders, the most common outcome was that full time staff in public sector mental health services split their time to add a private practice caseload.

Component C provided more objective but complementary evidence. It examined the numbers of full time equivalent (FTE) providers in the public mental health sector in each year from 1995-96 to 2007-08 (updated by the Department of Health and Ageing to 2008-09 for the purposes of the summative evaluation), and assessed whether these numbers had dropped after the introduction of Better Access in late 2006⁶. Component C drew on public sector staffing data from the Mental Health Establishments National Minimum Dataset and registered Better Access provider data from Medicare. The former were available as FTE. The latter were only available as headcounts. These were converted to deemed FTE (DFTE) using data on the number and duration of sessions rendered by each provider.

Figure 3 summarises the results of the Component C analysis. It shows that the numbers of FTE psychologists, social workers and occupational therapists providing care in public sector mental health services have risen steadily since 1995-96. This is probably due to additional investment in tertiary training places.¹ The rate of increase has not changed since the introduction of Better Access. With a few exceptions, these patterns were relatively consistent across states and territories. For example, the numbers of FTE psychologists in public sector mental health services continued to increase after the introduction of Better Access in all states and territories except Victoria (where they remained unchanged overall) and Tasmania and the Australian Capital Territory (where they decreased overall). Within states and territories, the patterns differed between capital cities and other areas. Again taking psychologists as the example, the FTE workforce decreased outside of capital city areas in Victoria and Western Australia but increased in these areas in Queensland.

Figure 3: Better Access providers (DFTE) and public sector providers (FTE), by year, Component C



Overall, these data suggest that Better Access has not reduced the size of the public sector mental health workforce. They cannot shed light on a number of other related questions, however. For example, they do not provide an indication of the numbers of providers who work part time in the public and private sectors, and/or are providing private services that are funded through other avenues (e.g., the Access to Allied Psychological Services component of the Better Outcomes in Mental Health Care program). They also do not allow conclusions to be drawn about whether experienced providers may be more likely to leave the public sector, nor whether the balance of clinical and registered psychologists in the public sector has altered.

3b. Has Better Access improved multi-disciplinary collaboration between mental health care providers?

An explicit aim of Better Access is to “encourage a multi-disciplinary approach to mental health care”. The Medicare item numbers require GPs and allied health professionals to work together in a more systematic manner than they may have in the past. GPs are able to refer consumers to a wider range of providers than was previously the case, and their referrals are a mandatory part of the pathway to care from allied health professionals. Their role in the review process is also crucial; a consumer cannot receive more than six (or 12) sessions from the allied health professional unless he or she is reviewed by the GP. There is also an expectation on the part of the GP that the allied health professional will provide reports on the consumer’s progress. This structure is designed to encourage inter-professional communication and collaboration.

The interviews and surveys completed by providers as part of Components A and A.2 suggest that the process requirements of Better Access have improved multi-disciplinary collaboration between mental health care providers.³⁴ The 39 clinical psychologists, 45 registered psychologists and 32 GPs who offered their opinions via Component A and the 156 social workers and 32 occupational therapists who did so via Component A.2 often discussed their working relationships with other mental health professionals. In general, they reported that the Better Access model of service delivery has worked well. Each party has developed an increased appreciation of the role of the other in providing mental health care, and this increased mutual respect. Not all views were positive, however. Some GPs reported that they did not always get sufficient feedback from allied health professionals about consumers’ progress. Some allied health professionals indicated that they had not always received adequate referral information from GPs. These diverse views were reinforced by participants in other relevant surveys of allied health professionals,³⁰⁻³³ and by stakeholders who contributed to the post-implementation review of Better Access.¹⁸

As well as fostering multi-disciplinary care through the conditions of the Medicare item numbers, Better Access has made an explicit attempt to strengthen the links between different provider types through its education and training initiatives. In particular, the Mental Health Professionals Network has promoted communication and networking between allied health professionals, GPs and other mental health care providers by running almost 1,200 multi-disciplinary workshops, supported by a range of resources (e.g., education and training materials, a website and web portal, and a 1800 phone line). The evaluation of MHPN, which formed part of Component E, found that these workshops were attended by close to 12,000 individuals, and that four fifths of the workshops had led to ongoing, multi-disciplinary networks of local providers.⁸⁹ These networks are currently in their early stages, but there are signs that they are increasing collaboration between providers.

Chapter 6: Discussion and conclusions

Summary of key findings

1. Has Better Access improved access to mental health care?

The summative evaluation provides good evidence that Better Access has improved access to mental health care and increased treatment rates for people with common mental disorders. Uptake of Better Access services has been high in absolute terms, even among relatively disadvantaged groups in the community. Better Access is not simply catering to people who were already in receipt of care and/or who have relatively mild symptoms; it is reaching significant numbers of people who have not accessed mental health care in the past; and it is providing treatment for people who have severe symptoms and debilitating levels of distress.

2. Is Better Access an effective (and cost-effective) model of service delivery?

Consumers are generally positive about Better Access as a model of service delivery, and appreciate the clinical care they have received. They are also achieving positive outcomes as assessed by improvements on standardised measures of psychological distress, depression, anxiety and stress. In the main, these outcomes are related to clinical and treatment factors rather than socio-demographic characteristics. Preliminary analysis of outcome and cost data for consumers seen by psychologists through Better Access suggests that the initiative is providing good value for money; equivalent data were not available for consumers seen by other provider groups.

3. Has Better Access had an impact on the profile and operation of Australia's mental health workforce?

The above achievements do not seem to be occurring at the expense of other parts of the mental health system. The numbers of allied health professionals in public mental health services have continued to rise, despite the attraction for many of working as private practitioners in the primary mental health care sector. In fact, Better Access may have had a positive effect on the way in which the Australian mental health workforce operates, with some indications that providers are engaging in more collaborative care.

Strengths and weaknesses of the evaluation

There have been several calls for a rigorous evaluation of Better Access.^{45 46} The current evaluation drew on 20 data sources, seven of which were commissioned by the Department of Health and Ageing in the context of a pre-determined evaluation framework, and 13 of which constituted separate studies, mostly conducted by independent parties. Additional relevant work is being conducted around Australia but was not available to the summative evaluation at the time of publication (e.g., a study of the uptake and impact of Better Access services for women which draws on data from the Australian Longitudinal Study on Women's Health²⁹). Using multiple relevant data sources enabled us to triangulate the findings. Offering several perspectives on the same question in this way is consistent with internationally-recognised best practice in health program evaluation.⁴⁷ It is rare to see major national health reforms undergo such comprehensive evaluations.

Having said this, each of the data sources available to the summative evaluation had its limitations. These limitations should be borne in mind in interpreting the above findings. It is fair

to say that in quite a few cases the limitations of one data source were addressed by another, and the findings provide a reasonably coherent assessment of the achievements of Better Access that engenders confidence in the evaluation conclusions.

Collectively, the data sources provided more information about some components of Better Access than others. As a consequence, the summative evaluation was only able to offer partial answers to some evaluation questions. One example is Question 2 – Is Better Access an effective (and cost-effective) model of service delivery? Answering this question relied heavily on data from Component A,³ which primarily considered outcomes for consumers seen by clinical and registered psychologists. Component A also collected data on outcomes for consumers seen by GPs, but these data were difficult to interpret because these consumers may have been treated by the GP in isolation or may have been referred to an allied health professional for care. Component A attempted to collect data on outcomes for consumers seen by psychiatrists but participation by this group of providers was low. It was beyond the scope of Component A to collect standardised outcome data for consumers seen by social workers and occupational therapists. Component A.2^{3,4} gauged the experiences of these consumers via self-report. Component A's data coverage means that statements can only really be made about the effectiveness (and cost-effectiveness) of the clinical and registered psychologist components of Better Access.

In addition, there are a number of questions which have not been addressed by the summative evaluation. For, it was beyond the scope of the evaluation to consider whether Better Access is an appropriate policy initiative. Similarly, the evaluation could not shed light on whether all Better Access providers are providing evidence-based mental health care (although the positive outcomes demonstrated by Component A³ and other sources suggest that they are doing something right). In addition, the evaluation was not in a position to demonstrate whether there are particular points of efficiency or inefficiency in the current model of service delivery. The evaluation was also unable to examine issues of access for groups who are often disadvantaged in terms of their access to mental health care, including Aboriginal and Torres Strait Islander people and people from culturally and linguistically diverse backgrounds.

Interpreting the findings

Better Access is the first time in Australia that specific primary mental health care services have attracted reimbursement through the MBS in any major way. It has been widely scrutinised by a range of observers. The concerns that have been expressed about Better Access have generally not been based on data. It is worth considering some of these criticisms, and examining the extent to which the summative evaluation's findings confirm or disconfirm them.

Firstly, some commentators have focused on the significant uptake of Better Access services and expressed concern about the resultant high costs to government.^{46 48} The summative evaluation suggests that the high level of uptake should be viewed positively rather than negatively, because it indicates that substantial numbers of consumers with previously unmet need for mental health care are now receiving it. In addition, the summative evaluation provides evidence that, when outcomes and costs are considered together, Better Access provides good value for money.

Secondly, there have been concerns that Better Access provides inequitable levels of service to particular at-risk groups – disadvantaging young people because they typically do not make contact with GPs, thereby limiting their referral to allied health professionals,^{46 48} and disadvantaging people in socio-economically disadvantaged and rural areas because providers prefer to practice in more affluent metropolitan areas.^{46 48 49} The summative evaluation shows that although young people and people in the most socio-economically disadvantaged and most

remote areas have made comparatively lower use of Better Access services, their uptake (in absolute terms) has still been significant. In addition, their uptake has been increasing at a greater rate than that of their peers.

Thirdly, the claim has been made that many of the recipients of care under the Better Access scheme were already receiving psychological care.^{46 48} The summative evaluation suggests that this is not the case. The majority of relevant data sources indicated that Better Access is providing services for significant numbers of “new” mental health consumers.

Fourthly, some commentators have argued that the fee-for-service foundation of Better Access has militated against collaborative care.^{50 51} The summative evaluation provides some evidence that Better Access has fostered collaborations between providers that did not exist in the past. The requirement that GPs must complete a mental health treatment plan in order for a consumer to be seen by an allied health professional has resulted in these professionals developing working relationships that are based on improved appreciation of each other’s role in mental health care. Communication between relevant parties appears to have improved, but is not yet optimal.

Finally, different groups of allied health professionals have expressed disparate views about the services that should be offered through Better Access and the providers who should be eligible to offer them.^{46 52-57} Registered psychologists have contended that they are essentially providing the same services as clinical psychologists and should be reimbursed commensurately; clinical psychologists have maintained that registered psychologists are providing the bulk of services and may not be achieving optimal outcomes for clients. Social workers and occupational therapists have stressed the importance of retaining their services. Various other groups of service providers have argued that their services should be eligible for a Medicare Benefits Schedule rebate. The summative evaluation can only inform these debates in a limited way. Component A provided evidence that registered psychologists are achieving positive outcomes for consumers, and Component A.2 showed that consumers were satisfied with the care they received from social workers and occupational therapists.

Conclusions

Better Access has increased access to mental health care for significant numbers of Australians. This includes many people who have been traditionally disadvantaged in the past. It has achieved good clinical outcomes for many of these consumers. These achievements should not be underestimated. Good mental health is important to the capacity of individuals to lead a fulfilling life (e.g., by studying, working, pursuing leisure interests, making housing choices, having meaningful relationships with family and friends, and participating in social and community activities). This major mental health reform seems to have improved access to and outcomes from primary mental health care for people with common mental disorders.

References

1. Council of Australian Governments. National Action Plan on Mental Health 2006-2011. Canberra: Council of Australian Governments, 2006.
2. Department of Health and Ageing. Evaluation Framework: Better Access to Psychiatrists, Psychologists and General Practitioners through the Medicare Benefits Schedule - The Better Access Initiative. Canberra: Department of Health and Ageing, 2008.
3. Pirkis J, Ftanou M, Williamson M, Machlin A, Warr D, Christo J, et al. Evaluation of the Better Access to Psychiatrists, Psychologists and GPs through the Medicare Benefits Schedule Initiative. Component A: A Study of Consumers and their Outcomes - Final Report. Melbourne: University of Melbourne, 2010.
4. Pirkis J, Williamson M, Ftanou M, Machlin A, Warr D, Castan L, et al. Evaluation of the Better Access to Psychiatrists, Psychologists and GPs through the Medicare Benefits Schedule Initiative. Component A.2: A Study of Consumers and their Outcomes (Focusing on the Occupational Therapy and Social Work Sectors): University of Melbourne, 2010.
5. Harris M, Pirkis J, Burgess P, Olesen S, Bassilios B, Fletcher J, et al. Evaluation of the Better Access to Psychiatrists, Psychologists, and GPs through the Medicare Benefit Schedule Initiative. Component B: An analysis of Medicare Benefits Schedule (MBS) and Pharmaceutical Benefits Scheme (PBS) administration data: University of Melbourne, 2010.
6. King D, Tan Y, Wainer J, Smith L, Fitzpatrick D, Sun L, et al. Evaluation of the Better Access Initiative Component C: Analysis of the Allied Mental Health Workforce Supply and Distribution: National Institute of Labour Studies, Flinders University, 2010.
7. KPMG. Evaluation of the Better Access to Psychiatrists, Psychologists and General Practitioners through the Medicare Benefits Schedule (Better Access) Initiative - Component D: Consultation with Stakeholders. Final Report. Canberra: KPMG, 2010.
8. Christo J, Machlin A, Fletcher J, King K, Blashki G, Pirkis J. The Independent Evaluation of the Mental Health Professionals Network: Sustainability Evaluation Report. Melbourne: University of Melbourne, 2010.
9. Fletcher J, Machlin A, Christo J, King K, Bassilios B, Blashki G, et al. The Independent Evaluation of the Mental Health Professionals Network: Final Evaluation Report. Melbourne: University of Melbourne, 2010.
10. Saw S, Noja M, Slade T, Deady M. Evaluation of Better Access to Psychiatrists, Psychologists and General Practitioners through the Medical Benefits Schedule (Better Access) Initiative. Component F: Analysis of the Second National Survey of Mental Health and Wellbeing. Canberra: Department of Health and Ageing, 2010.
11. Australian Bureau of Statistics. Mental Health and Wellbeing: Profile of Australian Adults (Cat. No. 4326.0). Canberra: Canberra: Australian Bureau of Statistics, 1998.
12. Australian Bureau of Statistics. National Survey of Mental Health and Wellbeing: Summary of Results, 2007 (Cat. No. 4326.0). Canberra: Australian Bureau of Statistics, 2008.
13. Burgess P, Pirkis J, Slade T, Johnston A, Meadows G, Gunn J. Service use for mental health problems: Findings from the 2007 National Survey of Mental Health and Wellbeing. Australian and New Zealand Journal of Psychiatry 2009;43(7):615-23.
14. Harris MG, Burgess PM, Pirkis JE, Slade TN, Whiteford HA. National policy initiative to improve access to psychological services for people with affective and anxiety disorders: A population-level analysis. British Journal of Psychiatry 2011;198:99-108.
15. Parslow R, Jorm A. Who uses mental health services in Australia? An analysis of data from the National Survey of Mental Health and Wellbeing. Australian and New Zealand Journal of Psychiatry 2000;34(6):997-1008.
16. Slade T, Johnston A, Oakley-Browne M, Andrews G, Whiteford H. 2007 National Survey of Mental Health and Wellbeing: Methods and Key Findings. Australian and New Zealand Journal of Psychiatry 2009;43(7):594-605.

17. Department of Health and Ageing. Using Administrative Data on Health Service Utilisation to Estimate the Treatment Rate for Mental Illness in Australia, 2009-10: Technical Paper to Accompany Estimates made by Mental Health Reform Branch, Mental Health and Chronic Disease Division. Canberra: Department of Health and Ageing, 2011.
18. Australian Government Department of Health and Ageing. Post-Implementation Review of the Better Access to Psychiatrists, Psychologists and General Practitioners through the Medicare Benefits Schedule (MBS) Initiative. Canberra: Commonwealth of Australia, 2009.
19. Australian Institute of Health and Welfare. Mental Health Services in Australia, 2006-07. Mental health series no. 11. Cat. no. HSE 74 Canberra: AIHW, 2009.
20. Australian Institute of Health and Welfare. Mental health services in Australia 2007-08. Mental health series no. 12. Cat. no. HSE 88. Canberra: AIHW, 2010.
21. Russell L. An assessment of Commonwealth Mental Health Programs. Sydney: Menzies Centre for Health Policy, University of Sydney and Australian National University, 2008.
22. Russell L. An Updated Analysis of the Medicare Better Access Mental Health Program. Sydney: Menzies Centre for Health Policy, University of Sydney and Australian National University, 2009.
23. Russell L. An Update on Mental Health Issues, Including an Analysis of 2009-2010 Mental Health Budgets from the Commonwealth and State and Territory Governments. Sydney: Menzies Centre for Health Policy, University of Sydney and Australian National University, 2009.
24. Bassilios B, Pirkis JE, Fletcher JR, Burgess P, Gurrin L, King K, et al. The complementarity of two Australian primary mental health care initiatives. *Aust N Z J Psychiatry* 2010;44(11):997-1004.
25. Fletcher J, Bassilios B, Kohn F, Naccarella L, Blashki GA, Burgess PM, et al. Meeting demand for psychological services for people with depression and anxiety: recent developments in primary mental health care. *Medical Journal of Australia* 2008;18(12):S107-S09.
26. Whiteford A, Doessel DP, Sheridan JS. Uptake of Medicare Benefits Schedule items by psychologists and other mental health practitioners. *Clinical Psychologist* 2008;12(2):50-56.
27. Britt H, Miller G. General Practice in Australia. Health Priorities and Policies 1998 to 2008 (General Practice Series No. 24, Cat. No. GEP 24). Sydney: University of Sydney and the Australian Institute of Health and Welfare, 2009.
28. Britt H, Miller G, Charles J, Henderson J, Bayram C, Pan Y, et al. General Practice Activity in Australia 2008-2009 (General Practice Series No. 25, Cat. No. GEP 25). Sydney: University of Sydney and the Australian Institute of Health and Welfare, 2010.
29. Byles J, Dolja-Gore X, Loxton D, Parkinson L, Stewart-Williams J. Women's uptake of Medicare Benefits Schedule mental health items for general practitioners, psychologists and other allied mental health professionals. *Medical Journal of Australia* 2011;194(4):175-79.
30. Forsyth C, Mathews R. Survey of members providing services under the Better Access and Better Outcomes initiatives. *InPsych* 2009;31:30-33.
31. Giese J, Littlefield L, Mathews R. Survey of members providing Medicare-funded services under the Better Access initiative. *InPsych* 2008;30:36-37.
32. Hitch D. A survey of occupational therapists providing services under the Better Access to Mental Health initiative. *Australian e-Journal for the Advancement of Mental Health* 2009;8(1):95-104.
33. Fletcher J, Pirkis J, King K, Christo J, Bassilios B, Burgess P, et al. Experiences of psychologists and their clients with the Better Access initiative. Forthcoming.
34. Giese J, Lindner H, Forsyth C, Lovelock H. Survey of clients receiving Medicare-funded psychological services under Better Access initiative. *InPsych* 2008;30(4):32-33.
35. Mackey C, Capitanio L, Erikson J, Faulkner C, Grace O, Herrmann-Doig T, et al. Treatment outcome benchmarking data for private practice settings. 33rd National Conference of the Australian Association of Cognitive and Behavioural Therapy. Melbourne, 2010.
36. Mackey C, Capitanio L, Erikson J, Faulkner C, Grace O, Herrmann-Doig T, et al. Treatment outcome benchmarking data for private practice settings. 11th International Mental

- Health Conference of the Australia and New Zealand Mental Health Association. Surfers Paradise, 2010.
37. Hitch D. Personal communication, 2011.
 38. General Practice Mental Health Standards Collaboration. General Practice Mental Health Standards Collaboration (GPMHSC) Evaluation: A Snapshot of Mental Health Care Provision in Australian General Practice. Melbourne: General Practice Mental Health Standards Collaboration, 2009.
 39. Australian College of Rural and Remote Medicine. Provision of Mental Health Disorders Package for Rural Practice: External Evaluation. Brisbane: Australian College of Rural and Remote Medicine, 2009.
 40. Westley J. Better Access Information and Orientation Session: Final Report. Canberra: Australian General Practice Network, 2008.
 41. Andrews G, Team. TI. Tolkein II: A Needs-based, Costed, Stepped-care Model for Mental Health Services. Sydney: World Health Organization Collaborating Centre for Classification in Mental Health, 2007.
 42. New South Wales Department of Health. Mental Health Clinical Care and Prevention Model: A Population Mental Health Model (MH-CCP Version 1.11). Sydney: New South Wales Department of Health, 2010.
 43. Hickie I, Groom G, McGorry P, Davenport T, Luscombe G. Australian mental health reform: Time for real outcomes. *Medical Journal of Australia* 2005;182:401-06.
 44. Andrews G, Issakidis C, Sanderson K, Corry J, Lapsley H. Utilising survey data to inform public policy: Comparison of the cost-effectiveness of treatment of ten mental disorders. *British Journal of Psychiatry* 2004;184:526-33.
 45. Carey TA, Rickwood D, Baker K. What does \$AUD27,650,523.80 worth of evidence look like? *Clinical Psychologist* 2009;13(1):10-16.
 46. Rosenberg S, Hickie I. How to tackle a giant: Creating a genuine evaluation of the Better Access Program. *Australasian Psychiatry* 2011;18(6):496-502.
 47. Ovreteit J. Evaluating Health Interventions. Buckingham: Open University Press, 1998.
 48. Mental Health Council of Australia. Mental Health Fact Sheet: Analysis of the Better Access Scheme. Canberra: Mental Health Council of Australia, 2010.
 49. Dunbar J, Hickie I, Wakerman J, Reddy P. New money for mental health: Will it make things better for rural and remote Australia? *Medical Journal of Australia* 2007;186(11):587-98.
 50. Hickie I, McGorry P. Increased access to evidence-based primary mental health care: Will the implementation match the rhetoric? *Medical Journal of Australia* 2007;187(2):101-03.
 51. Rosenberg S, Hickie I, Mendoza J. National mental health reform: Less talk, more action. *Medical Journal of Australia* 2009;190(4):193-95.
 52. Allen-Kelly K. Out of the wilderness: Australian social workers embrace their campaigning roots. *Australian Social Work* 2010;63(3):245-49.
 53. Littlefield L, Giese J. The genesis, implementation and impact of the Better Access mental health initiative introducing Medicare-funded psychology services. *Clinical Psychologist* 2008;12:42-49.
 54. Speech Pathology Australia. Submission to Department of Health and Ageing. Melbourne: Speech Pathology Australia, 2008.
 55. Armstrong P. Special editorial: Update of ACA actions in regard to Medicare rebates. *Counselling Australia* 2007;7(4):102-03.
 56. Australian Association of Social Workers. Professor Pat McGorry condemns budget cuts to mental health services for low income and rural Australians (Media release). Canberra: Australian Association of Social Workers, 2010.
 57. McEvoy P. Submission to Minister Mark Butler on the Contribution of Long-term Intensive Psychoanalytic Psychotherapy for Depression, Anxiety and Severe Mental Illness within the Better Access Initiative. Perth: Australian Institution of Group Psychotherapists, Australian Centre for Psychoanalysis, Australian and New Zealand Society of Jungian Analysts, Australian Psychoanalytic Society and Psychoanalytic Psychotherapy Association of Australasia, 2010.

Appendix 1: Relationship between original evaluation framework and current evaluation questions

| ORIGINAL EVALUATION FRAMEWORK | | CURRENT EVALUATION QUESTION(S) |
|---|---|--------------------------------|
| DOMAIN | EVALUATION QUESTION | |
| 1. Access to services | 1a. To what extent has the Better Access initiative provided access to mental health care for people with mental disorders? Across all of Australia? Across all age groups | 1a, 1b, 1c, 1e |
| | 1b. To what extent has the Better Access initiative provided access to affordable care? | 1a, 1b, 1c |
| | 1c. To what extent has the Better Access initiative provided equitable access to populations in need? In particular: people living in rural and remote areas; children and young people; older persons; Indigenous Australians; and people from culturally and linguistically diverse backgrounds | 1c |
| 2. Appropriateness of services | 2d. To what extent has the Better Access initiative provided evidence-based mental health care to people with mental disorders? | - |
| | 2e. To what extent has the better Access initiative provided services that match client needs and expectations? | 2a |
| 3. Effectiveness of services | 3f. To what extent has the Better Access initiative improved mental health outcomes for people with a mental disorder? | 2a |
| 4. Impact on system of mental health care | 4g. To what extent has the Better Access initiative provided interdisciplinary mental health care for people with mental disorders? | 3b |
| | 4h. To what extent has the Better Access initiative impacted on the use of medications commonly prescribed for treatment of mental disorders, in particular anti-depressant medication? | - |
| | 4i. To what extent has the Better Access initiative impacted on related Medicare Benefits Schedule services? | 1d |
| | 4j. To what extent has the Better Access initiative impacted on the supply and distribution of the allied mental health workforce? | 3a |
| | 4k. How has the Better Access initiative interacted with other related programs/initiatives, including the Better Outcomes in Mental Health Care program and the More Allied Health Services program? | - |
| 5. Skilled, knowledgeable and integrated workforce | 5l. To what extent has the Better Access initiative education and training increased the: <ul style="list-style-type: none"> • Knowledge, skills and confidence of GPs in the diagnosis, treatment, management and appropriate referral of people with mental disorders? • Knowledge, skills and confidence of the professionals working together to provide interdisciplinary care | 3b |
| | 5m. To what extent has the Better Access initiative provided access to multidisciplinary education and training for GPs, allied mental health professionals and psychiatrists? <ul style="list-style-type: none"> • How many professionals have been trained? • Has access been equitable? | 3b |
| | 5n. To what extent have consumers and carers participated in the delivery of education and training activities? | - |
| | 5o. To what extent has the Better Access initiative changed the practices of GPs, psychiatrists, allied mental health professionals and paediatricians? | 3b |

Appendix 2: Assessing the effects of uncertainty in the Department of Health and Ageing's estimate of the proportion of Australians with a mental disorder who received mental health care each year between 2006-07 and 2009-10

This appendix describes the results of modelling that was undertaken by the evaluation team to assess the effects of uncertainty in key parameters used in the Department of Health and Ageing model to estimate the proportion of Australians with a mental disorder who received mental health treatment in each year over the period 2006-07 to 2009-10. The model is described in more detail below and is elaborated in full in papers made available by the Department to the evaluators.

The most recent estimate of treatment rates for mental disorder in Australia was provided by the 2007 National Survey of Mental Health and Well Being (NSMHWB, 2007). In principle, the Survey provides estimates of both (1) the number of persons with a mental disorder in Australia in the past year and (2) the proportion of these persons who reported receiving some type of mental health treatment in that year. This survey had two major limitations for the purposes of estimating any impact that the Better Access Initiative has had on treatment rates for mental disorder.

The first limitation was that it was conducted in 2007 and asked about access to treatment in the one year period before the date of the survey. The Survey therefore only covered the first year's operation of the Better Access Initiative so these data could not be used to assess the impact of Better Access on rates of mental health treatment for any of the subsequent years. The second limitation was that the survey data did not provide complete coverage of the Australian population. Specifically, it did not sample Australians who were younger than 16 years of age or older than 85 years. In addition its coverage was restricted to persons living in private households. This excluded elderly people in hospitals and aged care facilities with mental disorders. For these reasons, estimates of the number of persons in the younger and older age groups who had a mental disorder in the past year had to be derived from other sources .

Why Model the Effects of Uncertainty?

In order to produce the desired estimate, the Department needed to calculate (1) the number of persons with a mental disorder treated in each year as a proportion of (2) the number of Australians who had a mental disorder in that year. There is uncertainty in the estimates of both (1) and (2) that arises for a number of reasons.

One cause of uncertainty is sampling error in some estimates e.g. of the proportion of persons aged 16 to 64 years estimated to have had a mental disorder in the past year by the National Survey of Mental Health and Well Being, 2007, a population survey of mental disorders in a representative sample of Australians between 16 and 85 years.

A different type of uncertainty arises, for example, because of the lack of key data. For example, there are no data on the proportion of persons who received mental health care in any year from both state mental health services and Commonwealth funded MBS services (e.g. those provided by general practitioners or other health professionals under Better Access). In this case, the Department's model had to make assumptions about the likely extent of such double treatment.

By modelling the effects of uncertainty in key parameters of the Department's model we were able to assess the extent to which changes in the estimated proportion of persons with mental disorders who receive mental health treatment may have been due to sampling error or uncertainty in key parameters.

The Department of Health and Ageing Model

The Department's model estimated the proportion of persons with a mental disorder who received mental health treatment in the past year using the following data sources and steps.

All population data on the estimated number of Australians in each age group in each year were obtained from the Australian Bureau of Statistics projections from census data of the number in the Australian population in each year by age as at June for that year. We treated the ABS estimates as being without error for the purpose of this exercise.

1. *Estimating of number of Australians with mental disorders*

The number of Australians with mental disorders in the past year was estimated by adding together estimates in each of the following three age groups (see table 1).

1.1 Mental disorders in persons aged 0-15 years:

Age specific estimates on the proportion of persons in this age group with a mental disorder were obtained from a New South Wales Department of Health report 'Mental Health Clinical Care and Prevention Model (MH-CCP): A Population Mental Health Model', first released in 2001 and currently being revised (New South Wales Department of Health, 2001). This model used estimates from the Australian Burden of Disease and Injury study (Begg et al, 2007) that were, in turn, derived from multiple epidemiological sources.

1.2 Mental disorders among persons aged 16-64 year olds:

These estimates were based on the estimated prevalence of mental disorders in this age group in the NSMHWB, 2007 (Australian Bureau of Statistics, 2009).

1.3 Mental disorders in persons aged 65 years and older

The prevalence of mental disorders in this age group was also estimated from the New South Wales MH-CCP estimates for 2 age groups: 65-74 and 75 and over. These were obtained by the same type of modelling used to estimate the prevalence of mental disorders among persons 15 years and younger.

In the opinion of the evaluators these data sources were the best available for the purpose of estimating number of persons in each age group with a mental disorder in the past year. Each of these prevalence estimates was multiplied by the number of persons in each age and sex grouping in the Australian population (see table 1).

Table 1: The estimated prevalence and number of persons with a mental disorder

| Age group | Prevalence | Number of people with 12 month disorders | | | |
|--------------|--------------|--|------------------|------------------|------------------|
| | | 2006-07 | 2007-08 | 2008-09 | 2009-10 |
| 0-15 | 15.4% | 674,141 | 681,546 | 690,366 | 697,657 |
| 16-64 | 22.2% | 3,089,046 | 3,158,081 | 3,230,351 | 3,282,449 |
| 65-74 | 13.6% | 197,087 | 202,750 | 210,740 | 219,523 |
| 75+ | 16.1% | 210,359 | 214,342 | 218,280 | 223,092 |
| Total | 20.1% | 4,170,634 | 4,256,720 | 4,349,738 | 4,422,721 |

2. Estimating the number of Australians using mental health services

In the Department's model an estimate of the number of Australians who received treatment for a mental disorder in each year was obtained by combining a series of separate estimates of the number of persons receiving different types of mental health care in each year (see table 2). These numbers were derived as follows.

2.1 Persons receiving identified mental health services funded by the Commonwealth

Data on these persons was derived from Medicare claims data on mental health services subsidised by the Department of Health and Ageing through the Medical Benefits Schedule. These services could be provided by general practitioners, specialist psychiatrists and other health professionals under the Better Access Initiative and other Commonwealth schemes that allow mental health specific consultations to be identified. These data provide the best available data source for these services.

2.2 Persons who receive mental health treatment in state and territory funded mental health services

This comprised data on persons receiving treatment in state- and territory-funded community mental health services which are believed to provide a reasonably comprehensive count of the total population treated. The coverage of these data varied between states and methods of collection may have differed between states Adjustments were made to account for known under-counting by Victoria but specific studies are needed to improve the consistency and quality of these data in all jurisdictions.

2.3 Persons treated for mental disorders with the Department of Veterans' Affairs.

This estimate was provided by the Department Veterans 'Affairs based on their records of the number of veterans and their dependents who received mental health services funded by the Department in 1997-98, projected forward in subsequent years as a proportion of the declining DVA treatment population. More recent data would be preferable but were unavailable.

2.4 Other persons treated by a general practitioner for a mental disorder

The NSMHWB in 1997 and 2007 showed that general practitioners are the health professional most often consulted by persons with a mental disorder. Surveys of general practice consultations (such as BEACH) also show that GPs do not always bill these consultations as mental health consultations (Australian Institute of Health and Welfare, 2010). BEACH data were used to estimate the rate of growth in GP mental health consultations since Better Access was implemented. The proportion of persons with a mental disorder who consulted a GP for a mental

health problem in the 2007 NSMHWB was used to estimate the number of persons who consulted a GP for a mental disorder in each year (assuming that this proportion remained constant over the period). Based on this analysis, the estimated number of people with mental disorders treated by GPs who were not billed under a mental health item declined steeply between 2006-07 and 2009-10, probably as more GPs used MBS mental health under Better Access to bill for such consultations.

2.5 Persons receiving other mental health services not included in any of the above

The 2007 NSMHWB estimated that 6.6% of persons with a mental disorder in the past year had sought treatment for that disorder from a practitioner, other than a GP, specialist psychiatrist or psychologist. This may have included: specialist medical practitioners funded through the MBS (e.g. paediatricians who treated children with mental disorders); general public hospitals and health centres without a mental health unit (and hence not included in state and territory client counts); public alcohol and drug treatment services; state and territory community health services; aged care residential centres; and general hospital emergency departments.

When adjusted to remove people who also received treatment from specialist mental health provider the NSMHWB estimate was reduced to 1.6%. This was probably an underestimate because it excluded treatment providers who were not counted elsewhere in the survey. In the absence of better information, the number of people treated by 'other health services' was estimated as the midpoint (4.1%) of the minimum (1.6%) and maximum (6.6%) estimates derived from the NSMHWB.

2.6 Commonwealth and State and Territory Mental health Services not separately included

The Department's model did not include counts of the number of persons receiving mental health treatment from some Commonwealth and State and territory-funded services. In the case of the Commonwealth-funded services, these included: persons seen by allied health professionals under the Access to Allied Psychological Services (ATAPS) program; and persons seen by services funded through the National Youth mental health initiative (headspace). It was assumed in each case that persons treated through these programs were likely to be counted elsewhere, for example, under one of the MBS mental health service streams or in state and territory counts.

People treated in psychiatric units of private hospitals number (around 24,000 pa) were not included because it was assumed that almost all would already be included in the MBS data among people seen by Consultant Psychiatrists.

In the case of states and territory-funded services, the counts excluded: a small number of persons treated in hospital psychiatric units and community residential services who do not receive clinical ambulatory care services; and persons treated by primary mental health care teams based in state funded community health centres. For some jurisdictions the latter services may include significant numbers of clients but no national data were available to estimate their number.

The evaluators accepted that it was reasonable not to include separate estimates of the number of persons treated through these mental health services. They agreed that in many cases these persons would already be included under other headings. In those cases, where they may not be already included, the model errs appropriately in the direction of conservatism. The consequence is that the estimates from the Commonwealth model are more likely to underestimate the number of persons with mental disorders who are receiving treatment for those disorders.

2.7 *Adjusting for overlap between Persons Treated in Commonwealth and State and Territory mental health services*

A person with a mental disorder in any one year could receive treatment for that disorder in both a state/territory mental health service and from a Commonwealth-funded health practitioner. An accurate estimate of the overlap between the clientele of the two types of service would require the linkage of records for individuals in order to provide a count of the number of unique persons who were treated in each system.

In the absence of such data, the number of persons treated in state/territory services was discounted by 15% in the Department's model. This figure was derived from the proportion of persons in state mental health services who were reported to have had 'one contact only' with state/territory mental health services. The view was that these persons were unlikely to have the type of severe mental illnesses that state services primarily cater for (namely, a psychosis, severe depression, severe personality disorder, etc). It was more likely that they had a common mental disorder, such as, anxiety or depression, and that they would obtain treatment from a practitioner funded by MBS.

The evaluators could not identify any better data on the extent overlap between persons receiving mental health services provided by the Commonwealth and State and territory governments. They thought it reasonable to assume that state/territory and Commonwealth mental health services treat different patient populations. Since this was the least certain data source contributing to the Department's estimate we modelled the effects of substantial uncertainty around this figure in sensitivity analyses by varying this assumed proportion between 10% and 20%.

Table 2: Estimated numbers of persons treated for a mental health problem

| | 2006-07 | 2007-08 | 2008-09 | 2009-10 |
|--|------------------|------------------|------------------|------------------|
| State and Territory MHS | 300,108 | 299,530 | 308,722 | 312,689 |
| MBS funded mental health services - GP only | 235,285 | 386,885 | 485,056 | 533,261 |
| MBS funded services - other providers +/- GP | 413,990 | 620,519 | 740,455 | 833,519 |
| DVA mental health care | 63,415 | 60,815 | 58,151 | 55,628 |
| MBS funded GP services not billed as mental health items | 373,518 | 222,816 | 188,100 | 123,240 |
| Other health services | 170,996 | 174,526 | 178,339 | 181,332 |
| Total | 1,557,313 | 1,765,091 | 1,958,824 | 2,039,668 |

3. *The percentage of Australians with mental disorders who received treatment*

The estimated percentages of Australians with a mental disorder in the past year who received mental health treatment in that year was produced by dividing the estimated number of persons treated for a mental disorder in each year by the estimated number of persons with a mental disorder in that year (see table 3).

Table 3: Estimated percentages of Australians with a mental disorder in the past year who received mental health treatment in that year

| | 2006-07 | 2007-08 | 2008-09 | 2009-10 |
|--|--------------|--------------|--------------|--------------|
| State and Territory MHS | 7.2% | 7.0% | 7.1% | 7.1% |
| MBS funded mental health services - GP only | 5.6% | 9.1% | 11.2% | 12.1% |
| MBS funded mental health services - other +/- GP | 9.9% | 14.6% | 17.0% | 18.8% |
| DVA mental health care | 1.5% | 1.4% | 1.3% | 1.3% |
| MBS funded GP services not billed as mental health items | 9.0% | 5.2% | 4.3% | 2.8% |
| Other health services | 4.1% | 4.1% | 4.1% | 4.1% |
| Total | 37.3% | 41.5% | 45.0% | 46.1% |

Modelling the effects of uncertainty in the Department's model

We used the Monte Carlo simulation program Ersatz (Barendregt, 2010) to assess the effects of uncertainty on the estimated proportion of persons with a mental disorder who were treated for a mental health problem in each year. This numerical method was used because uncertainty originated from several sources, which made it not feasible to use an analytical approach.

The sources of uncertainty can be grouped into two categories: sampling uncertainty, and other uncertainty. First, sampling uncertainty affected the estimated prevalence of people with any mental disorder in the 16-64 year age group that was based on the NSMHWB, 2007. The standard assumption is that prevalence estimates follow a Binomial distribution. We used the Beta distribution as a continuous approximation of the Binomial (Gelman, 2004). The parameters of the Beta distribution were the number of cases and number of non-cases that were obtained by multiplying the observed proportion by the sample size of the NSMHWB.

For age groups 0-15, 65-74, and 75+ the estimated proportions were based on various sources, and no sample sizes were available. We assumed that the standard error in these age groups was the same as in the 16-64 age group and derived parameters for Beta distributions for these age groups, using the method of moments (Briggs, 2006).

Other data inputs are based on population counts instead of a sample, and therefore have no sampling error. But they can be affected by uncertainty because of misclassification, incompleteness, and double counting. The uncertainty in each case was modeled by assuming triangular distributions, which took as parameters a lowest, most likely, and highest value according to the informed judgments of the evaluators. The variables were (see table 4):

Table 4: Variables with uncertainty, assumed distributions and parameter values

| Variable | Distribution ¹ | Parameter 1 | Parameter 2 | Parameter 3 |
|--|---------------------------|-------------|-------------|-------------|
| Prevalence disorder 0-15 | Beta | 809 | 4436 | n/a |
| Prevalence disorder 16-64 | Beta | 1537 | 3399 | n/a |
| Prevalence disorder 65-74 | Beta | 638 | 4072 | n/a |
| Prevalence disorder 75+ | Beta | 870 | 4549 | n/a |
| MBS funded GP services not billed as mental health items | Triangular | 0.9 | 1 | 1.1 |
| Other health services (non mental health) | Triangular | 0.016 | 0.041 | 0.066 |
| Double count state/territory and Commonwealth | Triangular | 0.1 | 0.15 | 0.2 |

1: Beta distribution: parameter 1 is α_1 , parameter 2 is α_2 , parameter 3 is not applicable; Triangular distribution: parameter 1 is lowest, parameter 2 is most likely, parameter 3 is highest.

To calculate the uncertainty in the proportion receiving mental health services, we replaced the central estimates of the variables listed in Table 4 with the corresponding random Ersatz functions, and recalculated the spreadsheet 2000 times. At each recalculation the Ersatz functions drew a random value from each of the random functions. From the resulting distribution in outcomes, Ersatz calculated 95% uncertainty intervals based on percentiles.

Results

The results of modeling the uncertainty in the Department's model are summarized in table 4 below for each year. These include in each case the best or mean estimate of the percentage of persons with a mental disorder in the past year who received mental health treatment for that disorder and the upper and lower limits of a 95% uncertainty interval around each of these estimates (derived from the distribution generated from 2000 iterations). The key results are as follows.

First, the estimated proportion of persons treated for a mental health problem increased steadily each year from 37.4% in 2006-07 to 46.1% in 2009-2010. There was an overall increase of 8.7% in the proportion of persons with a mental disorder who were estimated to have received mental health treatment.

Second, there was considerable uncertainty around each of these estimates. They generally fell within plus or minus 3.9% of the best estimate. Thus, for example, in 2006-07, the 95% uncertainty interval around the estimate of 37.4% ranged between 33.9% and 40.8% (a range of 6.9%).

Third, the intervals around the best estimate for each year did not overlap for 2007-8 and 2008-9 with the best estimate in the year before. This was not the case for 2009-10. This pattern of results indicates that the increase between 2006-7 and 2008-9 in the percentage persons with a mental disorder who received treatment was unlikely to be due to chance variations in the data. We can be less confident about the smaller increase between the last two years of the period, suggesting a possible slowing in the percentage treated in the most recent period. With this exception, overall, there has been a significant increase in the proportion of persons with a mental disorder who receive mental health treatment for that disorder in the past year.

Table 5: Estimated Percentages of persons with a mental disorder treated in each year with 95% uncertainty intervals

| | 2006-07 | 2007-08 | 2008-09 | 2009-10 |
|--------------|---------|---------|---------|---------|
| Mean | 37.4 | 41.5 | 45.0 | 46.1 |
| 95%CI | | | | |
| LL | 35.0 | 39.7 | 42.7 | 43.8 |
| UL | 39.6 | 43.7 | 47.3 | 48.4 |

Discussion

The uncertainty analysis indicated that the proportion of persons with a mental disorder in the past year who received treatment for that disorder in the year has increased steadily since 2007. Uncertainty in the estimates is unlikely to explain this trend, with the exception of the last two years in the data series.

The only external source of comparison with these estimates is that derived from the NSMHWB in 2007. The survey can be used to estimate the proportion of persons with a mental disorder in the past year who received treatment for that disorder (see table 6). According to the Survey, 34.9% of persons with a disorder in that year received mental health treatment, reducing to 32.9% when adjustments are made for the younger and older population groups. The estimate for 2007 derived from the Department's model (as indicated above) was 38.7%. These estimates show reasonable convergence for the single year in which estimates can be derived by the two methods. There may have been some underestimation in the 2006-07 administrative data because this was the commencement year for Better Access and the data used to derive the estimate were only available for 8 months of the year (Nov 06 to Dec 07).

Table 6: Estimated number of persons with a mental disorder receiving treatment for that disorder in 2007 (from NSMHWB)

| Age group | Persons with any 12 month disorder using health services for a mental health problem | |
|------------------|---|------------------|
| | % | N |
| 0-15 | 25.0% | 168,535 |
| 16-64 | 35.0% | 1,081,166 |
| 65-74 | 38.9% | 76,667 |
| 75+ | 22.6% | 47,541 |
| Total | 32.9% | 1,373,909 |

Limitations of model estimates

The data sources used to produce the Department's estimates are the best available but they have their limitations.

The Survey data are the best available on the number of Australians with a mental disorder in the past year but they are known to under-enumerate Australians with a mental disorder in the past year in persons under 16 years and over 65 years. The revised estimates supplement the survey estimates to the degree that is possible for persons under 16 years and over 65 years, using the best available international data.

The estimates of numbers of persons treated for a mental disorder come from a combination of sources. Some are administrative data such as that from the MBS based on claims made for specific mental health services, or state/territory records of the number of persons treated for a mental disorder. The former data has probably been more consistently collected than the latter, where methods for the collection vary between states and territories. Some of the estimates are derived from NSMHWB data because there were no accessible data on the numbers of persons treated for a mental disorder by GPs who do not bill this as a mental health consultation or services provided by other practitioners. Nor were there good estimates of the proportion of persons with disorders who receive mental health care from other health care practitioners. There was considerable uncertainty around the nearest estimates of this proportion that were derived from the 2007 NSMHWB (namely, 1.6% to 6.6%).

Another major source of uncertainty was the extent of overlap in number of persons who receive treatment in both state/territory mental health services and from private practitioners under MBS billing was unknown. Such data could be obtained in future by record linkage between MBS and state mental health data sets. The overlap assumed in the Department's model was plausible, given what is known about the type of mental disorders in persons seen by the two types of service. The sensitivity analysis included an estimate of the effect of 33% variations in this assumed proportion.

In the absence of such data we think it unlikely that this source of uncertainty explains the increase in the proportion of persons with mental disorders treated for those disorders between 2006-07 and 2008-09. The extent of overlap would need to be much larger than we have assumed to eliminate this trend. This proportion would also need to increase steeply over time and even then it could not wholly explain the trend observed because many fewer persons received care in state mental health services than persons funded under the MBS. If policy makers wish to reduce this source of uncertainty then they need to fund and approve record linkage studies to estimate the number of patients who are treated in both treatment systems.

Acknowledgments

The consultants gratefully acknowledge the expert technical advice of Jan Barendregt (Associate Professor of Epidemiological Modelling, School of Population Health, The University of Queensland), Philip Burgess (Professor, Mental Health Services Research, School of Population Health, The University of Queensland), Amanda Baxter (Project Manager, Burden of Mental Disorders Research Group, Queensland Centre for Mental Health Research) and Bill Buckingham (Technical Advisor to Mental Health Reform Branch, Department of Health and Ageing).

References

Australian Bureau of Statistics. 2007 National Survey of Mental Health and Wellbeing: Users' Guide (Cat. No. 4327.0). Canberra: Australian Bureau of Statistics, 2009.

Australian Institute of Health and Welfare. Mental health services in Australia 2007–08. Mental health series no. 12. Cat. no. HSE 88. Canberra: AIHW, 2010.

Barendregt JJ. Ersatz. 1.1 ed. Brisbane: Epigear (www.epigear.com); 2010.

Begg S, Vos T, Barker B, Stevenson C, Stanley L, Lopez AD. The burden of disease and injury in Australia 2003. PHE 82. Canberra: AIHW 2007.

Briggs A, Sculpher M, Claxton K. Decision Modelling for Health Economic Evaluation. Oxford: Oxford University Press 2006.

Gelman A, Carlin JB, Stern HS, Rubin DB. Bayesian data analysis. 2nd ed. Boca Raton: Chapman & Hall/CRC 2004.

New South Wales Department of Health. Mental Health Clinical Care and Prevention Model: A Population Mental Health Model (MH-CCP Version 1.11). Sydney: New South Wales Department of Health, 2001. Available at: <http://www.health.nsw.gov.au/resources/mhdao/pdf/MHCCP.pdf>