

Research papers

Better outcomes in mental healthcare?

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ABSTRACT

Aims The Australian Better Outcomes in Mental Health Care (BOiMHC) initiative strives to achieve better outcomes for people with mental health problems, by providing general practitioners (GPs) with training, incentives for delivering structured, quality care, and access to specialists. The initiative has five components, including the Access to Allied Health Services component, which enables GPs to refer consumers to allied health professionals for psychological interventions, via 102 projects conducted through Divisions of General Practice. In order to assess whether the BOiMHC initiative is in fact achieving better outcomes, outcomes must be measured systematically. This paper explores the current nature and extent of outcome measurement in the Access to Allied Health Services projects.

Methods A brief survey elicited information from divisions on the current and intended use of outcome measures in these projects.

Results Responses were received from 92 projects (90%). Eighty of these (87%) currently use or intend to use an outcome measure, with the most common being the Kessler 10 (78%) and

the Depression Anxiety Stress Scales (25%). GPs are involved in administering these measures at assessment and review, although there is a greater reliance on allied health professionals at review. There is considerable potential for aggregating outcome data nationally: in 78% of projects, outcome data are being provided to the division; in 71% outcome data can be linked to an individual consumer (through a unique identifier); and in 80% there is commitment to submitting outcome data to a purpose-designed dataset.

Conclusions Outcome measurement provides a common metric against which to assess the effectiveness (and cost-effectiveness) of projects in terms of impacts for consumers. The time is ripe to introduce routine collation of outcome measures data into these projects, in order to showcase their achievements and provide lessons about their limitations. Implications for others implementing outcome measurement as part of primary mental healthcare reforms are discussed.

Keywords: allied health, anxiety, depression, general practice, mental health, outcome measurement, primary care

Introduction

In Australia, general practitioners (GPs) provide the majority of mental healthcare for people with conditions such as depression and anxiety.¹ Usually, this occurs under a fee-for-service arrangement where a rebate up to a schedule fee is paid by Medicare (Australia's universal health insurance system) and any gap payment is borne by the consumer.² Several factors militate against GPs providing optimal care (e.g. their training does not always equip them adequately, and the fee-for-service system acts as a disincentive to providing complex consultations), and consequently they often seek to refer consumers to their specialist colleagues, such as psychologists and other allied health professionals.³ These allied health professionals are trained to deal with mental health problems, and they typically do so in tailored sessions that are of an adequate length and number to work with the consumer on identifying issues and developing strategies. However, their services have

traditionally fallen outside the scope of Medicare, which means that there have often been substantial out-of-pocket costs for the consumer that represent a barrier to access.²

This would not be such a problem if disorders like depression and anxiety were trivial or affected only a small proportion of the population, but this is not the case. The burden of mental illness in Australia is high, topped only by heart disease and cancer, and depression and anxiety are responsible for more than 50% of this burden. Depression alone represents the leading cause of non-fatal disability.⁴

In response to this situation, the Australian Government provided \$AUD120.4 million in July 2001 to fund a major national systemic reform known as the Better Outcomes in Mental Health Care (BOiMHC) initiative. This initiative involves five interconnected components, which are outlined in Table 1 and have been described in detail elsewhere.^{5,6} This paper focuses on one component only – the Access to Allied Health Services component. Through this component, appropriately trained GPs

Table 1 Components of the Better Outcomes in Mental Health Care initiative

Component	Description
1 Education and training for GPs	Through this component, GPs can participate in familiarisation training (which introduces them to the Better Outcomes in Mental Health Care initiative), then Level 1 training (which equips them to perform the three-step mental health process, described below) and then Level 2 training (which provides them with the skills necessary to undertake focused psychological strategies, also described below).
2 The three-step mental health process	This component provides a framework for GPs to manage mental health problems, and includes an assessment (Step 1), preparation of a mental health plan (Step 2) and a review (Step 3). GPs are reimbursed by the Health Insurance Commission (the body responsible for administering Medicare) for providing the three-step process, via a service incentive payment. Only GPs who have completed Level 1 training are eligible for this payment.
3 Focused psychological strategies	This component promotes evidence-based focused psychological strategies, namely psycho-education, cognitive behavioural therapy and interpersonal therapy. These strategies are normally delivered by GPs in up to six planned sessions, each lasting a minimum of 30 minutes. Specific Medicare item numbers have been created to recompense GPs for their time. Only GPs who have completed Level 2 training are eligible to bill the Health Insurance Commission against these item numbers.
4 Access to allied health services	Through this component, GPs who have completed Level 1 training are able to refer consumers to allied health professionals for the same focused psychological strategies described above. The allied health professionals are contracted to or employed by Divisions of General Practice through Access to Allied Health Services projects.
5 Access to psychiatrist support	This component enables psychiatrists to be reimbursed for participating in case conferences with GPs and others, and provides consultancy assistance to GPs by psychiatrists in emergency situations.

can assess the needs of a consumer, develop a mental health plan that involves referral of that consumer to an allied health professional for focused psychological strategies (namely psycho-education, cognitive behavioural therapy and interpersonal therapy), and review the consumer's progress after six sessions of such care. The allied health professionals are contracted to or employed by Divisions of General Practice through Access to Allied Health Services projects. To date, 102 projects have been funded across the country in three funding rounds: 15 from June 2002 (Round 1 pilot projects); 14 from January 2003 (Round 1 supplementary projects); 40 from July 2003 (Round 2 projects); and 33 from July 2004 (Round 3 projects).

As its name suggests, the BOiMHC initiative strives to achieve better outcomes for people with mental health problems (particularly depression and anxiety). It recognises that in order to assess whether it is achieving this goal, processes for systematically measuring outcomes need to be established. Each Access to Allied Health Services project is required to put in place a system whereby an outcome measure is administered when a consumer is assessed, and re-administered when he/she is reviewed. Which outcome measure is used, how its administration is monitored, and whether data are systematically collected and reported upon are issues that are left to the discretion of the division(s) responsible for the given project.

To date, full advantage has not been taken of the opportunity to examine whether the Access to Allied Health Services projects are having a positive impact for consumers in terms of their level of functioning, severity of symptoms and/or quality of life. There are other indicators that the projects are making a difference, essentially provided by two sources. The first of these is the local evaluation reports that projects are contractually obliged to submit annually to the Australian Government, and the second is a minimum dataset, into which projects enter information about the socio-demographic and clinical characteristics of people accessing the projects, and the services they are receiving. Information from these sources was synthesised in an interim evaluation which suggested that the Round 1 projects have achieved a high level of uptake by GPs and allied health professionals, are reaching the consumers that they are targeting, are providing good quality care, and are generally well received by both consumers and providers.^{7,8} Consistent, quantitative data from valid and reliable outcome measures would be desirable to verify whether these positive findings are translating into improvements for individual consumers.

Having said this, it must be acknowledged that there has been some debate about the feasibility and utility of implementing outcome measurement in primary care settings, particularly when the GP is responsible for administration of the measure. There is recognition that outcome measurement for evaluation purposes alone is unlikely to be achieved, but some have argued that outcome measurement should be a routine part of clinical practice, creating the potential for it to inform evaluation exercises as a by-product.⁹ Others have disagreed, claiming that outcome measures do not have sufficient clinical utility to warrant their use, particularly since time spent on outcome measurement reduces the time available for provision of care.^{10,11}

As a first step towards examining the feasibility of using outcome measurement as an evaluation tool in the Access to Allied Health projects, this paper explores the current nature and extent of outcome measurement in these projects, with a view to informing their directions and potentially providing lessons for others wishing to implement routine outcome measurement in the context of primary mental healthcare reforms. Specifically, the paper reports on a scoping exercise conducted with a view to adding outcome measures fields to the above-mentioned minimum dataset, in a manner that would allow outcome data to be collated and aggregated across projects, and analysed nationally.

Methods

In August 2004, a brief survey was emailed to the person responsible for each of the 102 Access to Allied Health Services projects (usually the project manager or project officer, but in the absence of these, the divisional chief executive officer or equivalent). Respondents were asked to complete the survey and return it by email or fax. Reminder phone calls were made after one week.

The survey sought information on whether the project was currently using or intending to use an outcome measure (or several measures). If so, further information was sought on the specific measure(s), and issues to do with administration of the measure(s), data collection and data recording. Respondents were also invited to comment on issues related to outcome measurement.

Data were analysed using SPSS (Version 12.0.2).¹² All data are presented as simple frequencies or cross-tabulations.

Results

Response rate

Responses were received from 92 Access to Allied Health Services projects (90%): 14 Round 1 pilot projects (93%); 13 Round 1 supplementary projects (93%); 37 Round 2 projects (93%); and 28 Round 3 projects (85%).

Use of outcome measures

Eighty (87%) of the projects from which responses were received have made some investment in the use of outcome measures. Fifty-four (59%) are currently using at least one outcome measure, and 26 (28%) are intending to do so. For the purposes of the current paper, the current and intending users have been grouped together, on the grounds that many of the intending users are about to begin implementation.

A minority of projects have elected not to use outcome measures, for a variety of reasons. The most commonly-reported reason was summed up by a survey respondent who noted, '[We] opted not to use a prescriptive outcome measure as we did not feel there was a single tool which would be appropriate for all clinical situations'. These projects have tended to opt for more qualitative approaches to assessing whether they are having a positive impact for consumers, including 'GP and service provider feedback ...', 'a patient satisfaction survey', 'a client exit survey', and 'a general discussion'.

Specific measures used

The majority of projects (49, or 61%) are using only one outcome measure; a further 21 (26%) are using two; and eight (10%) are using three or more. Two projects (3%) have not yet settled on the specific measure(s) they will use, with the respondent from one commenting that they 'will ask GPs which they prefer', and the respondent from the other noting that have a preference for a consumer self-administered instrument.

Table 2 shows the specific measures favoured by the projects. By far the most popular measure is the Kessler 10 (K10), used in 62 projects (78%).¹³ This is followed by the Depression Anxiety Stress Scales (DASS), which is among the measures of choice in 20 projects (25%).¹⁴ The Health of the Nation Outcome Scales (HoNOS) has been adopted in seven projects (9%) and the Medical Outcome Study Short Form 12 (SF12) is being used in five (6%).^{15,16}

A further 17 measures are being used across the projects, but none of them in more than three. Together, these measures are providing indicators of change in severity of symptoms, level of functioning, disability, emotional distress and quality of life.

Survey respondents made comments on divisional experiences with some of these measures. Some were quite negative, with respondents variously noting that some GPs and allied health professionals have responded poorly to the Behaviour and Symptom Identification Scale (BASIS-32), the Global Assessment of Functioning (GAF), the K10 and the DASS.^{13,14,17,18} The latter two were labelled as '... a simplistic assessment that will always show an improvement and is therefore not very valid' and 'cumbersome ... [and] ... not always appropriate in severe cases', respectively. By contrast, however, other respondents were sanguine about particular measures (in some cases directly disagreeing with negative comments). For example, one respondent applauded the versatility of the K10, noting that it had been 'translated ... into 15 different languages'.¹³ Another was positive about the Outcome Rating Scale (ORS) and the Session Rating Scale (SRS), describing the former as 'well researched, having validity ..., simple to administer and reliable' and the latter as 'a great tool'.^{19,20} One respondent summed up the differences of opinion with regard to specific measures, noting that 'GPs favour different measures ... there is no consensus'.

Administration of the measures

Table 3 provides detail on who is responsible for the administration of the outcome measure(s) at assessment and review. At assessment, outcome measures are administered by the GP alone in 38 projects (48%), by the GP and the allied health professional in combination in 24 (30%) and by the allied health professional alone in 14 (18%). At review, there is a greater reliance on the allied health professional, with almost as many projects electing to give responsibility to the allied health professional alone (27, or 34%) as to the GP alone (31, or 39%), and a greater proportion of projects utilising both providers (19, or 24%). In very few projects are consumers administering self-report measures.

Qualitative responses from survey respondents shed further light on the above pattern of responsibility for administration. Many respondents commented that collecting outcome data from GPs is problematic. Typical responses were: 'It's a mammoth task to collect this data from GPs', 'GPs are not reliable in sending this data', 'It is hard to get the GP to administer them', and '[We've experienced] not much success in the past collecting [data] from the

Table 2 Outcome measures used in the Access to Allied Health Services projects ($n = 80$)

Measure	Frequency	Percentage
Adult Psychological Profile (APP-2001)	1	1
Anxiety Disorders Interview Schedule	1	1
Beck Anxiety Inventory (BAI)	2	3
Beck Depression Inventory (BDI)	4	5
Behaviour and Symptom Identification Scale (BASIS-32)	3	4
Depression Anxiety Stress Scales (DASS)	20	25
Depression Recovery Scale (DRS)	1	1
Edinburgh Postnatal Depression Scale (EPNDS)	1	1
General Health Questionnaire (GHQ-28)	1	1
General Well Being Index (GWBI)	1	1
Global Assessment of Functioning (GAF)	2	3
Hamilton Rating Scale for Depression (HRSD)	1	1
Health of the Nation Outcome Scales (HoNOS)	7	9
Hospital Anxiety and Depression Scale (HADS)	2	3
Kessler 10 (K10)	62	78
Medical Outcome Study – Short Form 12 (SF12)	5	6
Outcome Rating Scale (ORS)	1	1
Session Rating Scale (SRS)	1	1
Short Progress Assessment (SPA)	1	1
State-Trait Anxiety Inventory (STAI)	1	1
Zung Self-Rating Depression Scale (SDS)	1	1

GP'. According to respondents, the situation is worse at review than assessment, as evidenced by statements like, 'The initial K10 (assessment with the GP) is easier to obtain than the final K10 (done at review with the GP)' and 'It would be impossible to get patient outcome measure information from GPs post review'.

In part, this situation is due to the reluctance of some GPs to be involved in outcome data collection, exemplified by the comments of one respondent: 'We encourage them but some don't want to'. However, the problem is exacerbated by the fact that some consumers do not return to the GP for the review session, at which the follow-up outcome measure should be administered. A number of respondents made comments like, 'Outcome measurement has been problematic for patients who drop out of therapy', 'Outcome measurement

is not always possible at review as patients do not return to see the GP after sessions', and '[We've had] ... some problems with post-therapy administration, as the majority of clients do not use six sessions'.

In many projects, the solution has been to give allied health professionals responsibility for administering the outcome measures at the last session before the consumer returns to the GP for review. This is easier, in that divisions typically have contractual arrangements with allied health professionals that can include a requirement that they submit outcome data. In general, this approach is seen as being more successful in terms of compliance with outcome measurement, with respondents making comments like, '[It's] more streamlined if the allied health professional does the final assessment', 'It was a local decision to have our allied health professionals do the DASS pre- and post- – this has

Table 3 Responsibility for administration of outcome measure(s) at assessment and review (*n* = 80)

Assessment	Review							Total
	GP	Allied health professional	Consumer	GP and allied health	GP and consumer	Allied health professional and consumer	GP and allied health professional and consumer	
GP	27	8	0	3	0	0	0	38
Allied health professional	0	14	0	0	0	0	0	14
Consumer	0	0	1	0	0	0	0	1
GP and allied health professional	4	5	0	15	0	0	0	24
GP and consumer	0	0	0	0	0	0	0	0
Allied health professional and consumer	0	0	0	0	0	2	0	2
GP and allied health professional and consumer	0	0	0	1	0	0	0	1
Total	31	27	1	19	0	2	0	80

been much more reliable' and 'Data collected by the clinical psychologist comes back to the division; data collected by the GP doesn't – it's too difficult'. The disadvantage, however, is that this means that the outcome measure is often administered by a different person at assessment and review, which raises questions about inter-rater reliability.

The potential for aggregating outcome data

Several conditions must be met in order to aggregate available outcome data in a meaningful manner. Firstly, the data must be made available to the division(s) responsible for the project, and not kept in the rooms of the GP or allied health professional. In 62 projects (78%), outcome data are being provided to the division. In the remaining projects, outcome data collection rests with the GP and/or allied health professional and is not monitored by the division. Several survey respondents made comments like, 'Outcome measures are left to the discretion of the GP and service provider – the division takes no part in any clinical aspects of the service' and '[Outcome measurement] is too hard to police and follow up'.

Secondly, the data must be provided in such a way that given scores can be linked to an individual consumer, in order that change over time (i.e. between assessment and review) can be gauged. In 57 projects (71%), outcome data can be attributed to a specific consumer. All consumer-level data entered into the minimum dataset by divisions is de-identified first, so this requires systems of unique identifiers to be in place. Several survey respondents commented on the importance of maintaining consumer privacy and confidentiality with respect to outcome measurement, making statements like, '[We] would need to speak to the allied health professional re privacy and confidentiality before agreeing to submit data'. Other survey respondents went one step further, noting that they would require consumer approval before outcome data could be submitted, irrespective of its de-identification. Comments from these respondents included, 'As long as the client agrees' and '[Our] main concern is patient approval'.

Finally, the Division(s) responsible for the project must agree to submit outcome data to the minimum dataset. Divisions are prepared to do this in the case of 64 projects (80%). This includes several projects where the previously mentioned conditions are not yet met, but where the Division views outcome measurement as sufficiently important to change their policies and practices. Most survey respondents were extremely positive about the opportunity to aggregate outcome data, making comments

like, '[It's] a very good idea', '[It's] timely', and '[It's] another good measure to show the initiative is working'. However, the impost of additional paperwork was noted, and there was some criticism that outcome measurement should have occurred from the outset, exemplified by comments such as, 'It should have been put in place at the beginning', and 'This is something that should have been thought of initially'. A compromise position between these two standpoints was the view that collating outcome data prospectively would be highly desirable, but expecting divisions to enter retrospectively collected outcome data into the minimum dataset would be unacceptable and infeasible.

Discussion

The current study has shown that most Access to Allied Health Services projects are encouraging GPs and allied health professionals (and occasionally consumers) to administer outcome measures at assessment and review, although not all are doing so in a way that allows meaningful data to be derived from the measures. In general, the measures selected by projects are brief, easy to score, reliable, valid and sensitive to change – properties recognised as important for outcome measures to be taken up in routine use.²¹

There are some issues about the utility of the data for evaluation purposes. In some projects, data are retained by GPs and/or allied health professionals and are not provided to the division. In other projects, data are provided to the division, but it is not always possible to link the data to a specific consumer. Divisions are conscious of ethical considerations, and those that have facilitated record linkage have generally employed unique identifiers to maintain privacy and confidentiality. Even when data are available and linkable, there are issues about comprehensiveness, with GPs (and allied health professionals) completing and submitting outcome measurements for only a proportion of all consumers. The latter problem highlights the need for training and support for these providers, in order to improve data quality. Together, these issues have meant that, until now, outcome measurement in the Access to Allied Health Services projects has been sub-optimal. Evidence from elsewhere suggests that only a minority of projects are making use of outcome measures in their local evaluations – an analysis of the local evaluation reports provided to the Australian Government by Round 1 projects found that only 21% used outcome data to examine impacts for consumers.⁸

On the whole, there is commitment to formalising the collection of outcome data in a way that permits aggregation across projects. There is recognition that this will add value to current evaluation efforts, strengthening the potential to demonstrate what is working and what is not working, and the way in which this varies according to the context. For example, the projects are operating under a range of models, which differ in terms of the means of retaining allied health professionals, the location of allied health professionals and referral mechanisms.⁸ To date, it has not been possible to examine whether one model is more effective (or cost-effective) than another, but consistent, comprehensive outcome measurement would allow this to happen.

The positive response to outcome measurement is perhaps surprising, given that divisions typically experience heavy paperwork and other administrative demands associated with the Access to Allied Health Services projects, and it might have been anticipated that they would fear that this would add to their load. On the contrary, many survey respondents observed that a consistent, national approach would streamline their own activities. Even those who believed that outcome measurement would create an extra impost upon their time generally considered that monitoring improved impacts for consumers was important enough to warrant the additional effort. This is consistent with the movement towards outcome measurement as a routine component of quality assurance, evident elsewhere in the mental health sector in Australia.²²

Given this enthusiasm, the next step would seem to be conducting trials of the introduction of outcome measure fields on the minimum dataset, to be used in a voluntary capacity. Clearly, this would involve consideration of logistical, practical and methodological issues at the points of data collection, entry, analysis and reporting. Fields that captured total scores on given measures might be preferable to ones that captured individual item scores, in terms of minimising the burden for divisions. Systems of support and incentives to encourage GPs (and allied health professionals) to administer the measures and provide de-identified data to divisions might be warranted. Checks of comprehensiveness and accuracy of data would need to be made, and consideration given to issues of inter-rater reliability. Ways of controlling for the phase of illness in an outcome measurement exercise that involves two snapshots in time would need to be examined. The best ways to provide feedback to divisions, GPs, allied health professionals and consumers would also need to be explored.

As noted, the specific outcome measure(s) used has deliberately been left to the discretion of the

individual division. Giving providers (and sometimes consumers) a say in which measure to adopt has the advantage of ensuring 'buy-in' by these stakeholders, and may well have contributed to the positive response to outcome measurement generally revealed in the current survey. However, the flip-side is that a wide range of measures is being used, which has implications for making comparisons across projects. If a trial of outcome measures fields on the minimum dataset is mounted, means of comparing information from disparate outcome measures will need to be examined. This might include mapping exercises, explorations of the correlations between different measures, and the development of common indices of change (e.g. the use of the 'effect size').²³

The experience of the Access to Allied Health Services projects may provide lessons for others wishing to implement routine outcome measurement in the context of primary mental healthcare reforms, either within Australia or internationally. Although the projects are operating in a specific way, some of the findings may be generalisable beyond this circumstance. For example, GPs have clear views about the pros and cons of different measures, and need support to implement them properly. Efforts that may be helpful in this regard include: reinforcing the clinical utility of outcome measurement generally; training in the use of specific measures; embedding these measures in routine practice; and ensuring that outcome measurement does not cost GPs time or income. Strong leadership may also be an important factor.

Conclusions

Outcome measurement is not the be-all and end-all of evaluation, but it does provide a common metric against which to assess the effectiveness (and cost-effectiveness) of projects in terms of impacts for consumers, which is of immense value to policy makers. It should be regarded as a complement to, rather than an alternative to, other more qualitative indicators of success. The current study has demonstrated that outcome measurement is occurring within individual projects, and that there is considerable commitment to and potential for aggregating outcome data nationally. The time is ripe to introduce routine collation of outcome measures data into the Access to Allied Health Services projects in Australia, in order to showcase their achievements and provide lessons about their limitations.

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CONFLICTS OF INTEREST

None.

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