Routine outcome measurement in public mental health: results of a clinician survey

Tom Callaly, Mary Hyland, Tim Coombs and Tom Trauer

Abstract

This paper explores the attitudes of mental health workers in one public mental health service towards the implementation and use of routine outcome measurement. Two years after their introduction into routine clinical practice, there were equal numbers of positive and negative observations from clinicians about the clinical value of the clinician-rated outcome measures, while more positive observations were made about value of the consumer-rated outcome measure. The most frequent observation from clinicians in relation to making outcome measures more useful to them in clinical practice was that more training, particularly refresher training, is needed. In addition, clinicians indicated that more sophisticated support which assists them to understand the meaning and possible use of outcome measure ratings is required.

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What is known about the topic?

Previous studies of clinicians' attitudes towards outcome measures have involved clinicians with little or no experience of using them routinely and have highlighted concerns about the time taken to complete measures, a reluctance by some to complete routine outcome measures, even if it could be shown that it would lead to better services being provided, and scepticism about what a focus on health outcomes can achieve.

What does this paper add?

The views of clinicians in one public mental health service, studied several years after the national introduction of routine outcome measures, indicated mixed acceptance of the validity and usefulness of the measures. More training and better electronic reporting systems were the main improvement strategies suggested.

What are the implications?

Systems with the capacity to support clinicians and consumers to use outcome measures in their clinical interactions are needed, along with ongoing education and training in the use of ratings in everyday clinical practice.   ◆

THE NATIONAL MENTAL HEALTH STRATEGY recognises that continued improvement in the quality and effectiveness of treatment of people within mental health services relies on the development of sound information to support planning and service delivery. The introduction of routine out-come assessments using standard clinical assessment scales and a consumer self-report instrument in all public mental health services as well as private psychiatric inpatient facilities is seen as a key element in that information development.[1] The clinical assessment scales are measures of symptoms, functioning and disability, while the consumer self-reports are measures of problems, symptoms or distress.

Two clinician-rated outcome measures have now been mandated for use in adult public mental health services across Australia. They are the Health of the Nation Outcome Scales[2] (HoNOS) and the Abbreviated Life Skills Profile (LSP).[3] Three clinician-rated outcome measures are mandated for use in Child and Adolescent services — the Health of the Nation Outcome

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Scales for Children and Adolescents (HoNOSCA), the Children's Global Assessment Scale (CGAS)[4] and Factors Influencing Health Status (FIHS).[5] Aged Care mental health services are required to use three clinician-rated scales — the Health of the Nation Outcome Scales for Older People (HoNOS65+), the Life Skills Profile (LSP), and the Resource Utilisation Groups — Activities of Daily Living (RUG-ADL).[6] All adult and aged care mental health services are required to offer a consumer self-report to consumers. However, each state or territory can choose which of three self-reports to offer. Victoria, Tasmania and the Australian Capital Territory have chosen to use the Behaviour and Symptom Identification Scale 32 (BASIS-32);[7] New South Wales, South Australia, the Northern Territory and more recently Western Australia have chosen the Kessler-10 Plus (K-10+);[8] while Queensland has chosen the Mental Health Inventory (MHI-38)[9]. All child and adolescent services are required to use the same consumer (or parent or teacher) self-report measure — the Strengths and Difficulties Questionnaire (SDQ).[10] The Focus of Care (FOC)[5] is a measure developed in an earlier Australian casemix study which requires the clinician to select one of four options which attempt to capture the primary focus of care for each consumer (eg, acute care, extended intensive care) and is to be used in adult and aged care services.

A clear protocol for the use of these measures has been developed to ensure that they are completed regularly and at key transition points in the continuum of care.[11] In general, measures are to be completed by clinicians or offered to consumers at initial assessment in the community, every 3 months while the consumer is offered service, on admission to and discharge from a bed-based service, and on closure of a period of care in the community. All Australian states and territories have signed information development agreements that require them to submit routinely collected outcomes and casemix data to the Australian government on a regular basis. The first comprehensive analysis of national data on outcome measures submitted so far has been published by the Australian Mental Health Outcomes and Clas-sification Network and has been available on the their website since March 2005.[12]

While there has been considerable literature on the psychometric properties of the measures themselves and studies of different mental health service populations utilising routine outcome measure instruments, there has been less emphasis in the literature on the challenge of engaging clinicians, consumers and carers or on asking them for their advice on how to effectively introduce and use outcome measures. Understanding more about clinicians' and consumers' attitudes may improve our understanding of the day-to-day context in which data are being collected and their potential for a positive impact on clinical care.

Studies specifically eliciting clinicians' attitudes towards outcome measures have highlighted concerns about the time taken to complete measures, an unwillingness by some clinicians to complete routine outcome measures even if it could be shown that it would lead to better services being provided to consumers,[13] and scepticism about what a focus on health outcomes would achieve for community mental health clinicians or consumers.[14] Some clinicians have reservations about whether it is possible to measure change using simple outcome measures.[15,16] In addition, some believe that government motives for introducing routine outcome measures revolve more around developing tools to manage funding than to improve the quality of services, and they are concerned that the professionalism of mental health clinicians may not be respected in the process of implementation.[17] In a small study of clinician attitudes towards the use of outcome measures 12 months after their introduction in Western Australia, 44% of respondents reported that they believed they were a waste of time, an equal number said they were useful in tracking consumers' progress, while 78% indicated that they were in favour of their use.[18] Trauer, in a study of outcome ratings from four agencies in Victoria some time after their introduction, found that significant proportions of clinicians had no recorded instances of consumer self-rating associated with their assessments, and concluded that

service and clinician factors appeared to be equally as important as consumer factors in whether or not self-rating measures are completed.[19]

The current study was undertaken to learn more about clinician attitudes towards the utility and feasibility of using outcome measures and potential future strategies to integrate their use into everyday practice. The study was conducted 2 years after the introduction of the Victorian Government's mandated suite of outcome measures (including BASIS-32 as the consumer self-rated report) throughout the Barwon Health service. The Barwon Health mental health service, based in the regional Victorian city of Geelong, serves a total population of 250 000 people with about half the population in the city and half in the surrounding rural area, and provides adult, child and adolescent, and aged care mental health services.

Barwon Health was one of four pilot agencies in Victoria. Nine selected Barwon clinical staff attended a full-day "train the trainer" workshop conducted by a group of experts, and subsequently provided three-and-a-half-hour workshops to the remainder of the clinical workforce. No concerted effort was made to train senior managers and neither refresher training nor training for new staff was formally conducted until very recently (after about 30% of clinical staff stated they had had no training in the use of outcome measures).

Previous audits in this service have shown that clinician-rated measures are completed on the majority of occasions indicated by the protocol. In addition, this service has a higher completion rate of outcome measures than that of other services with which this service has been compared.[20] Thus the attitudes of this clinician group are based on considerable experience.

In 2001, computer software was introduced that allowed Barwon clinicians to complete outcome measures on screen, or enter ratings, and receive immediate feedback (in the form of simple graphs comparing recent ratings with all previous ratings for an individual or specific diagnostic group).[21]

Method

A qualitative methodology was used in this study. One of the authors (M H), a psychiatric nurse with extensive experience working with both community mental health teams and acute inpatient units, invited all clinicians from all clinical teams within the Barwon Health mental health service to participate in either focus groups at preset times or individual interviews if they preferred or were unable to attend a focus group. All focus group discussions and individual interviews were conducted between March and April 2003 and were audiotaped. About 15 hours of audiotaped material was transcribed verbatim. It was not practical using this method to identify individual clinicians on the recordings, or to count the number of clinicians who adopted a particular viewpoint, or record differences in attitude between members of different professional groups or different service settings. Only the frequency of observations made, rather than the numbers of clinicians making any particular observation, was recorded. A semi-structured interview consisting of eight questions, listed below, was used to ensure that key issues were covered during focus groups and individual interviews.

As this was considered to be a quality assurance project, ethics approval was not sought.

Data analysis

The interview transcripts were analysed by one member of the team using grounded theory techniques,[22] and major themes that emerged were identified. The eight questions of the semi-structured interview provided a framework within which reflection on themes occurred.

Findings

A total of 13 focus groups and seven individual interviews were conducted involving 83 clinicians from a total of 136 clinicians invited to participate. The participant group comprised 64 psychiatric nurses (from a possible 102), 12 allied health staff (from a possible 15) and seven medical staff (from a possible 19). The findings are

presented by identifying the major themes emerging from responses to each of the eight questions, the frequency of observations made on analysis of the transcripts in relation to some themes (rather than the numbers of clinicians in favour or against) and by illustrating themes with quotes from participants.

Question 1: Overall, have you found outcome measures to be of value in your clinical work?

Twenty-one observations were in favour of the proposition that outcome measures were of clinical value, while 19 were against. This question, like many below, opened up useful general discussion on outcome measures, and the major themes raised are captured in the comments below.

> I think they are of great clinical value. You can see when we have been doing them every 6 months, you probably don't think they are of any value at all but when you look at the broader picture you can actually see a progression.

> I would say they could be of clinical value but (that) will involve extra work. I'd have to say from my experience that it hasn't provided me, the clinician, with any extra benefits so far.

> I suppose it makes me think about — no not really — clinically it doesn't change anything, it's just a set of numbers.

Of major concern was the time taken to complete them. This was sometimes seen as time devoted to data collection at the expense of direct patient care.

> I think time is the critical issue and that we are being asked to spend more and more time on collecting information and filling out forms.

The most commonly mentioned clinical value of outcome measures was their potential to show the broader picture of the client's progress over time. Possible uses included improving the dialogue between clinicians and consumers, helping to identify goals for service planning, using the total score as a general rule of thumb to gauge the severity of consumers' problems and giving feedback to the client which demonstrates progress.

> To be honest they are of little value if the client is just asked to fill them in — they can be of value if the clinician and client sit down together and go through them question by question. Their value lies in the actual engagement process and interview process.

> I find it useful for some people to get them to look at what areas they are having difficulty in and to involve them more in their treatment rather than it's just being done to them. It is good to be able to compare it further on down the track and it often shows that they are actually moving ahead in some areas.

> I think the HoNOS has been of some clinical value because it distinguishes between those that have a severity of problems and so, I think, an HoNOS [score] greater than 10 is a lot different to an HoNOS [score] less than 10.

Question 2: Have you found HoNOS (or HoNOSCA, HoNOS65+) to be of value in your clinical work?

Similar numbers of observations were noted in favour of (30) and against (31) the proposition that the HoNOS family of measures are clinically useful. Clinicians asserted that a single rating scale, such as HoNOS, cannot really tell you anything that you do not already know as a clinician.

> Well [it's] not so much useful — we don't bother using it because we already know the stuff which comes out of the HoNOS so why would you go back and look at the HoNOS?

Some clinicians expressed the view that the HoNOS gave undue weight to some non-symptom areas.

> With regards to the HoNOS specifically I have found ... people who have a lot of

social problems tend to score quite high but they may not be psychiatrically unwell.

I am not a Centrelink officer, I am not interested in assessing whether people are capable of employment — it is really open to judgement.

Question 3: Have you found the LSP to be of value in your clinical work?

Again, similar numbers of observations were made in favour of (24) and against (23) the proposition that the LSP is clinically useful. Clinicians observed the LSP can remind staff of areas that may not be routinely covered or considered during assessment and review.

There are some things we sometimes take for granted that are overlooked and it (the LSP) is of value by bringing (issues) to my attention which I may well have forgotten before.

Question 4: Have you found the FOC to be of value in your clinical work?

There were 17 observations to the effect that the FOC was of no clinical value, while no positive observations about the FOC were made. Most observations were to the effect that clinicians did not know why FOC ratings were being collected, and many respondents freely admitted that they completed it very casually.

... Focus of Care ... I don't think it was ever accepted as a useful thing from the start really. It forces us to put patients into broad categories. I think, well, who is required to use that?

Question 5: Have you found the BASIS-32 to be of value in your clinical work?

All observations offered by clinicians as to whether the BASIS-32 was clinically of value reflected a positive attitude to its clinical use. There were 15 observations to the effect that BASIS-32 helped consumers identify their own needs, 12 stating it was useful in individual service planning, seven each to the effect that it helps generate better dialogue and helped the clinician see the world from the consumer's point of view, and six each to the effect that it can show

the consumer their change over time and that it helps bring up discussion about difficult issues. No observation was made to the effect that BASIS-32 was not of clinical value.

... I tend to use that (BASIS-32) when talking about the individual service plan and ... you get them to run through that and then you will look at that and say — well OK you feel that this one really is a big thing that we need to work on collaboratively.

I think the BASIS-32 is of good value in terms of setting goals.

It's good for setting your goals on your treatment plan.

It's good — using those graphs and taking them back to the client you can show them that they have improved — I think that for this particular reason they are useful over a longer period of time especially.

Respondents, however, recognised that a variety of factors influenced the completion of the consumer self-report measure. The greater the acuity of the consumer's illness the more likely they were not to be offered the BASIS-32 by clinicians and the more likely they were to refuse to complete it even if offered it. Clinicians were conscious that this could lead to a decreased opportunity for participation by this group in care planning and that the national data collection could be skewed by the exclusion of data on this group. In addition, there was recognition that the attitude of the clinician influences whether or not the consumer will complete the BASIS-32.

Well I actually have good response from my clients who do the BASIS-32. I think it's very much in the hands of the clinicians as to whether the client is prepared to do it or not.

While many uses of outcome measures were discussed, many barriers were identified which would impede them being fully achieved. In particular, the nature and quality of feedback to clinicians, the opportunities for, and quality of training, adequate technology to use ratings and senior staff commitment to their use were all seen as needing improvement.

Question 6: Why do you think that the state and Commonwealth governments are so enthusiastic about introducing routine outcome measures?

Most observations in response to this question were to the effect that the government has introduced the routine use of outcome measures in order to somehow control expenditure or develop new models of funding (37 observations). A number of clinicians observed that mental health and recovery is complex and that if Governments applied funding formulae based on diagnosis or simple measures of outcome, there was a risk that the flexibility clinicians can exercise in their practice would be undermined. While the majority of observations supported an interest in financial management as the government's principal motive for introducing the measures, there were a number of observations to the effect that such a nationwide data collection may lead to the ability to compare programs, treatment types and services and thus may provide valid data to support the development of more efficient and effective services (10 observations). Other observations indicated that some clinicians believed that outcome measures were introduced by government to increase clinician workload and to further the research agenda.

> … eventually it's going to be … for funding and I think that's a sad state of affairs.

> At the same time……… when people use it as a management tool and not a clinical tool … it loses the benefits of the tool.

> I mean psychiatry is a very subjective area. … if you are doing coronary artery bypass surgery you have got statistics. [Here] they're trying to apply something like that [a funding formula] to a very subjective area.

Question 7: Given your experience, have you any advice for other services and clinicians who are about to embark on using outcome measures.

Observations (in order of frequency) in response to this question were that others who are about to embark on using outcome measures should ensure good feedback to clinicians both in relation to individual consumers and service wide outcome results; adequate computer hardware and software needs to be provided to clinicians; and good quality training, including refresher training, must be provided.

> …they've got to have the hardware and software to make it a process that they can actually review what's done and the more that people can see the graphs … the more impact it can have on them.

> Feedback to the person actually entering the data … that's important and add the (capacity to make) comparisons of outcome measures across teams, across case managers and across groups. You don't get the feedback as to what the actual meaning (of ratings) is … or your performance with a particular client group.

Question 8: Given your experience of using outcome measures, have you any suggestions or advice for Barwon Health management to support making the collection of outcome measures more useful in the future?

When asked to consider advice for management, clinicians spoke again about training and useful feedback systems. They suggested more regular training to "close the gap between theory and practice". Observations were made to the effect that the effective collection and use of HoNOS ratings in Barwon Health was the result of the original intensive training when outcome measures were first implemented. It was observed that good quality training was lacking in relation to the consumer self-report measure. Orientation and the availability of refresher training were noted as gaps in clinicians' experience, and reference was made to the questionable validity of the data collected as a result.

> The big thing I can say — it is about people's attitude. Unless they are trained properly, and that can make it valuable, then it really

just becomes a joke. They just do it because it's got to be done and is no way of getting anything out of it. You know, I think that one of the things around here . . . is that they didn't provide enough training, it's piece-meal. People come in from other services and don't learn how to do it.

I feel certainly that education for clinicians is vital and I actually believe that the outcome measures education needs to be incorporated into an orientation package before a case manager or a clinician actually starts work.

Genuine commitment by local management and senior staff was recognised as critical.

They need senior staff to be supportive of the process; if senior staff aren't supportive then it's not going to flow through in the ranks.

Observations were made to the effect that if clinicians were to make the collection of these measures more useful, they needed guidelines about the meaning and significance of their rat-ings. Some clinicians were seeking more sophisti-cated feedback than just graphs showing the current or current-compared-with-past ratings. Clinicians stated that they wanted information about what constitutes "good" change.

Some program managers observed that educa-tion on how to use the data effectively at their level of management for service direction and profiling would be advantageous and that lack of this, to date, has meant they have not used the extensive database that has been available to them.

. . . you don't get any feedback as to what the actual meaning is in terms of clients coming through the service or your (client's) per-formance within a particular client group.

Clinicians suggested more case presentations to review individual ratings as a team and asked for "more usable feedback" on service and team performance.

If every team had a lap top, an LCD projec-tor, some time allocated for an admin assist-ant to get all of the data entered and there are

some clear guidelines in view of case reviews that incorporated the use of the graphs in the format, I think that it would have greater impact for clinical delivery . . .

Discussion

More than half of all clinicians working within the Barwon mental health service participated in this study and they provided a rich dataset to evaluate attitudes to the routine use of outcome measures.

About half the staff interviewed offered an opinion on whether the suite of outcome meas-ures overall is of clinical value at this time and their observations were equally divided on the subject. While at first this may appear to be a negative finding, a number of earlier studies of clinicians who had little or no experience of using outcome measures indicated that they were even less enthusiastic about their use,[13,15] which may mean that increasing use may lead to an increas-ing sense of clinical value.

Another important finding of this study is that the BASIS-32 attracted only positive responses in relation to its clinical value in contrast to the clinician-rated measures. This is an important finding given the lack of available literature on the utility in practice of consumer self-report measures even in circumstances where they are widely used.[23] Findings in the current study highlight the view many clinicians had that the BASIS-32 may provide additional understanding of consumers and may be used to improve dia-logue and to support care planning.

It should be noted that in a study conducted since this one using a questionnaire methodology, ratings of clinician-perceived value of all meas-ures (HoNOS, LSP and BASIS-32) declined over the 2003–2004 period.[24] This suggests that fol-lowing the introduction of outcome measures, there may be an initial period of relative enthusi-asm followed by a decline in perceived value by clinicians.

It is of concern that some respondents indi-cated a lack of understanding of outcome meas-ures, the intent of which is to track outcomes over

time, as indicated by the observation repeatedly made that the HoNOS had little value because it gives information that is already known by the clinician. The routine use of a measure such as the HoNOS encourages clinicians to make objective their subjective assessment of the severity of the consumers' problems. This may have some value during the assessment and review process by providing opportunities for discussion at multidisciplinary team meetings. But its principal value may only become evident over time by supporting and encouraging clinicians to reflect on change occurring in relation to individual consumers or groups of consumers.

The clinicians' understanding of the FOC is also of concern. Ensuring the accuracy of rating this measure during training has proven difficult,[25] and the comments of staff in this study reinforce these concerns. If clinicians readily admit that they do not understand a measure but continue to submit completed ratings, as this study suggests they do with the FOC, caution must be exercised in using the data for service development or funding purposes. This finding could indicate that the quality of training provided about FOC was poor, or that the FOC is inherently a poor measure which clinicians find difficult to understand and use.

A number of observations made by clinicians suggested mistrust of the government's agenda in requiring routine outcome measurement and a perception that government motives are related to funding rather than ensuring the quality and safety of services. This suggests that more work needs to be done in educating clinicians about the basis of government motivation and the potential value of good information to be used by governments and local organisations to provide better services for consumers.

Many of the observations put emphasis on the need for good quality training, including refresher training. This is almost certainly because the service had not developed any system for regular training after the initial round when the measures were first introduced. This finding has led to this service developing an ongoing training program and including knowledge of outcome measures among the core competencies focused on by our professional development team.

While observations made by clinical staff suggested that many clinicians did not find outcome measures to be of clinical value at the time of the study, many constructive observations were made about what was needed if they were to become useful. It should be noted that at the time of this study, clinicians in the Barwon service entered data on locally developed software which could provide immediate feedback in the form of simple graphs comparing recent ratings with all previous ratings for an individual or specific diagnostic group.[20] However this software was not used widely by clinicians to get feedback or to print graphs for use in clinical meetings. The need for separate logging-on and registration of clients in the outcome measures database has recently been removed through linking with the main patient management database in widespread use by clinicians, and it is believed that they are already using the system more widely.

Views expressed in this study suggested the need for more support in understanding what a particular rating or set of ratings means in terms of relative severity of the consumer's condition or adequacy of progress. Such support might take the form of building reference data into the system that enable the clinician to compare individual rating and progress with the reference data for that individual's age, gender, and diagnosis as well as their occasion of rating (eg, first assessment, review, discharge). The recent commencement by the Australian Government of provision of reference material, which can provide context to the outcome measures completed in clinical practice, could increase the use of outcome measures in case presentations and clinical reviews.

Agencies will need to explore how to provide more sophisticated reporting systems and tools if outcome measures are to support the consumer–clinician dialogue and their clinical potential is to be realised. For example, it may be useful to allow ratings for an individual, with relevant reference data, to be incorporated electronically into the care planning process.

A major limitation of the methodology in this study is that the frequency of observations made, rather than the numbers of clinicians making any particular observation, was recorded. As explained above, it was not possible to count numbers of clinicians making specific observation when analysing the recordings of focus groups and interviews because each clinician was not identifiable on the audiotapes. As a consequence, we can't assume that the number of observations is a measure of the generality or strength of opinion rather than a reflection of the frequency with which some clinicians expressed the same view. In addition, we don't know what the non-participants think. We need to be aware that their non-participation may be related to their holding particularly negative views of the use of outcome measurement.

An additional potential limitation of the methodology was the use of only one team member to analyse data for emergent themes without a separate process of cross checking.

Improving the quality and effectiveness of mental health services is a complex challenge and needs to be approached on many levels. Governments need reliable and accurate data about morbidity and the effectiveness of different programs and interventions to plan for future service development and to use existing resources in ways that are most effective. But it may be unrealistic to expect that an appreciation of this challenge for government alone will lead clinicians to complete, or encourage the consumers they work with to complete, outcome measures in a meaningful way. For clinicians and consumers to be engaged, they need to be convinced that the use of outcome measures can lead to improved quality of care at the individual consumer level, which relies on the quality of the clinician–consumer dialogue and of the therapeutic alliance.[26]

There are risks associated with the use of routine outcome measures to provide a major part of the information the government needs. The most obvious is that clinicians and consumers simply will not engage with the initiative, will not complete measures or will complete them in a way that generates data of questionable value. In this study, clinicians in one service have given indications as to what they believe is required for them to use outcome measure ratings in their clinical work, and this may be the most effective strategy that can be developed to engage both clinicians and consumers.

The attitudes of consumers also need to be elicited. By listening to clinicians and consumers, governments and clinical leaders have an opportunity to use outcome measures to support the clinician–consumer interaction, thereby helping to improve the quality of care that consumers receive and, as a consequence, to acquire the information that they need to better plan services and resource use.

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Competing interests

Tom Callaly, Tim Coombs and Tom Trauer are members of the National Expert Group on Mental Health Outcome Measures.

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