Benchmarking Australia's mental health services: is it possible and useful?

Tom J Meehan, Terry J Stedman, Ken E Neuendorf, Irene D Francisco and Malcolm G Neilson

Abstract

Background: Benchmarking of performance indicators in the mental health field is gaining currency in Australia as a strategy for improving service quality.

Aim: To engage mental health service providers in the collection and evaluation of performance data.

Methods: Three separate rounds of data collection involving high secure, extended treatment, and medium secure services were carried out between 2003 and 2005. Twenty-five core indicators were identified and these were used to assess service inputs, processes, outputs and outcomes.

Results: Differences in casemix, clinical practice and local business rules gave rise to variation in service performance. The benchmarking exercise led to the implementation of quality improvement initiatives.

Conclusions: It is possible and useful to collect and evaluate performance data for mental health services. While services appear similar enough to benchmark, information related to both casemix and service characteristics needs to be included in benchmarking data to understand the factors that produce differences in service performance.

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THE CONTEMPORARY APPLICATION of the term "benchmarking" emerged in commercial and industrial environments during the 1970s. Benchmarking described a process of monitoring performance so as to gain a competitive edge over industry peers. Today, the benchmarking of performance indicators is gaining currency in the health field as a strategy for improving the quality of service provision. As competition is less intense among health providers, benchmarking is considered a collaborative exercise. Participating organ-

What is known about the topic?

The benchmarking of performance indicators is promoted in the mental health field as a means of improving service quality. However, there is no information on the feasibility or usefulness of benchmarking mental health performance in Australia.

What does this study add?

The study provides insights into the selection of performance indicators, data collection techniques and outcomes. A number of issues to be considered in future benchmarking work are highlighted.

What are the implications for practice?

The benchmarking of performance indicators in the mental health field is possible and useful. Benchmarking can be an inexpensive exercise that provides valuable data for management decision making and quality improvement.

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I Overview of benchmarking projects					
Year	Service type	No. of services involved	No. of clients involved	Location of services	Proportion of services involved
2003	High secure	3	231	Interstate	75% of services in Australia
2004	Rehabilitation/CCUs	12	257	Queensland	100% of services in Qld
2005	Medium secure	4	97	Queensland	100% of services in Qld

isations agree to share information about their performance on a number of key areas such as efficiency, effectiveness, and safety. Having identified high performing organisations, the task is to identify and emulate the clinical/administrative practices that lead to superior performance.^{2,3} The collection and reporting of performance data has been promoted as a means of improving service quality through increased accountability and transparency. 4,5 Performance data enable service providers, service users and funding bodies to monitor the performance of a given organisation relative to its peers on selected parameters. This motivates organisations to achieve higher performance and to strive for service provision that is of an acceptable standard.⁶

Despite the perceived benefits of performance measurement, little work has been undertaken in Australia to assess the performance of mental health organisations. This is now being addressed through the National Mental Health Benchmarking Project, which is a collaborative initiative between the Australian and state/territory governments. The benchmarking of mental health services is in keeping with the broader generic framework developed by the National Health Performance Committee in 2001.

This paper describes early attempts to benchmark extended inpatient care services. An overview of the process employed to develop the performance indicators is provided, along with a discussion of issues that require consideration in future benchmarking efforts.

Benchmarking in practice

The benchmarking process was driven primarily by the need to evaluate service performance following major reform, and also to inform public debate about the role of inpatient mental health services. Initial benchmarking activity concerned the interstate benchmarking of high secure inpatient services in Queensland with similar services in South Australia and Victoria (Box 1). During 2004, performance indicators for extended treatment and rehabilitation services were developed and benchmarked against 12 similar services across Queensland. In the latest round of benchmarking, performance data for medium secure inpatient services were collected and reported.

All three rounds of benchmarking followed a similar procedure in keeping with the suggestions put forward by Weissman and colleagues. Representatives from each of the participating sites came together for a half-day workshop to identify a set of preliminary indicators. A total of 25 indicators covering four key domains were identified. These included:

- Input indicators (staff classification, staff/hours per patient/day, absenteeism, cost per patient/day, medication use, etc);
- Process indicators (rehabilitation programs, hours in rehabilitation, quantity of leave, seclusion use, etc):
- Output indicators: (number of clients treated, length of stay, discharges, readmissions, aggression, absconding, etc);
- Outcome indicators (clinical and functioning measures).

In addition, casemix information (eg, diagnosis, age, mental health classification, weight, physical health problems, substance misuse) for each of the participating units was collected to facilitate comparison between units.

Two levels of data were collected: "snap-shot" data were collected for every consumer in a

participating unit on an agreed date. These data included age, gender, weight, diagnosis, outcome measures (Health of the Nation Outcome Scales [HoNOS] and Life Skills Profile [LSP]), and length of stay for each client present on the census date. Second level data were collected for the previous 12 months and provided an overview of service functioning and throughput in relation to admissions/discharges, seclusion use, aggressive incidents, absconding and other incidents, staffing levels, sick leave, etc. A computerised data collection program was developed to reduce the cost of data entry and improve the quality of the data collected.

Each of the participating services received a summary report that compared its performance with that of each of the other sites. Variation in service size was controlled by converting the raw data to a ratio of occupancy as suggested by Bowers. Thus, most of the data were presented as a "rate per 100 occupied beds" to make comparison between the facilities (of different sizes) easier (Box 2). During data analysis/collation, suspect values (ie, extremely high/low values) were isolated and checked for accuracy by the contributing service. In addition, a 5% trim on the data sets was carried out so as to exclude extremely high or low values (ie, outliers).

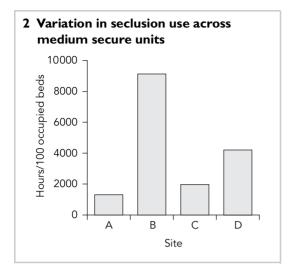
About 6 weeks after the dissemination of the summary report, each site was invited to present an overview of their performance data in a half-day workshop. Although the services in each round of benchmarking were generally engaged in the same business, there was considerable variation between services on many of the indicators. Services were asked to suggest reasons for the differences and to provide possible strategies to address these. The focus was on open discussion of the results and understanding how the data could be used to improve service provision, rather than "finger pointing".³ Even at this early stage, services identified a number of projects arising from the data. These included a review of seclusion use at one site and the implementation of a weight management program at another.

Benchmarking mental health services

Our experience of collecting performance data in the three rounds of benchmarking described here suggests that the benchmarking of mental health services is possible and feasible. However, a number of issues requiring further consideration were identified. First, it is clear that the data provided by the benchmarking sites were derived from a number of sources and collected by a number of different people. This raises questions about the reliability and validity of performance data. Despite attempts to ensure that each indicator was clearly defined, it was clear that there was wide variation in the data for some indicators. What constitutes rehabilitation programs, aggression and absconding can vary between services, and this will lead to variation in performance data. However, it is suggested that the focus of initial rounds of data collection should be on engaging services in the process. Data quality issues can always be addressed in subsequent rounds of benchmarking.

Second, while the term "benchmarking" was used to describe the process, benchmarks have not been established for any of the indicators. Benchmarks can be influenced by local conditions and circumstances and these may make it unrealistic for some services to achieve the benchmarks established for a group services as a whole. Thus, participating services were encouraged to examine their performance and set locally achievable benchmarks for their individual service.

Third, while providing feedback to providers is likely to improve service provision, it is difficult to determine how involvement in the collection of performance data changed provider behaviour. It is clear that a number of service improvement initiatives were established, and these seemed to emerge from the collection and evaluation of the performance data. There was "peer" pressure on services to address underperformance, since subsequent rounds of data collection were planned. The collection and analysis of performance data should be an ongoing process rather than a one-off activity.



Fourth, while organisations provide services to "similar" client groups (eg, medium secure), adjustment for differences in patient characteristics and treatment practices is required. In the absence of such adjustment, differences in casemix and treatment could lead to misleading conclusions about service performance. For example, data relating to medication use revealed that Site B (Box 2) had significantly lower levels of medication use. It is possible that this resulted in the need for higher levels of seclusion use.

Fifth, while most of the data required for the benchmarking process were obtained from established databases, the collection of client-related data on a census day was considered a useful strategy. Since these data had to be collected on each client in each participating service on a given date, it engaged clinical and nursing staff in the process. These clinicians were eager to learn about the results, especially for those indicators that were relevant to their clinical work and those that they had potential to influence (eg, seclusion use).

Sixth, extended time lags between data collection and reporting can severely hamper the usefulness of performance data in management decision making. ¹¹ Practices within mental health facilities are continuously changing, and performance data collected last year, for instance, may not be relevant today. Thus, efforts should be made to

ensure that the data collection period is recent and that the time between data collection and data reporting is kept to a minium.

Seventh, the collection and analysis of performance data does not have to be an expensive exercise. For example, the analysis of data and preparation of summary reports for the medium secure benchmarking project cost about \$8000 (or \$2000 for each of the four sites involved). Costs were minimised by having the participating sites collect their own data and supply these to the collating site on a prepared electronic database. This reduced the need to re-enter data and also decreased the time and costs associated with the preparation of the summary reports. The costs incurred in collecting the raw data by each of the sites is difficult to estimate, as some services had more sophisticated data retrieval systems than others. Finally, while data collection for some indicators was cumbersome and time consuming, these indicators did not contribute a great deal of useful information. Thus, a balance must be reached between the cost of collecting data for a given indicator and the value of those data to quality improvement initiatives.

Conclusions

The work described here demonstrates that it is possible to identify and collect data on key performance indicators for inpatient mental health services. While services appear similar enough to benchmark, information related to both casemix and service characteristics needs to be included in performance data in order to understand the factors that drive variation in service performance. Engaging services in the process of data collection and evaluation should be the aim of initial benchmarking activity refinement of indicators can occur with each additional round of data collection. Indeed. benchmarking should become a continuous process of performance measurement and improvement rather than a one-off activity. There is evidence that the collection and reporting of performance data did lead to the redesign of work practices in some services. Recognising how other similar services can provide care and treatment in a more efficient and effective manner is a powerful motivator for any service. It is anticipated that future benchmarking rounds will include greater consumer involvement and will be aligned to the national benchmarking activity currently under way in Australia.

Competing interests

The authors declare that they have no competing interests.

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