

# CORE Partnership Occasional Paper

No.3 July 2007

## Impact of the use of CORE System on service quality

### CORE Partnership Occasional Papers

The CORE Partnership consists of the CORE Benchmarking/User Network, the CORE System Trust (CORE CST - responsible for the copyright of CORE measures), CORE Information Management Systems Ltd. (CORE IMS - responsible for Change Agency and software support), and associated researchers. This series of Occasional Papers is aimed primarily at sharing with practising clinicians and service managers the experience gained in wide scale use of the CORE System.

### Data source

The data is drawn from the 2005 primary care psychological therapy service sector of the CORE National Research Database (NRD) which contains outcome data for 35,000 patients treated in routine clinical practice across 34 services by almost 600 therapists over a period of three years ending June 2005. Pre- and post-therapy measures were available for 12,000 patients.

Further information about the CORE Partnership, the nature of these Occasional Papers and the data source is given at the end of this paper.

### Summary

- Service performance can be tracked effectively on a quarterly basis using the twin measures of percentage of patients improved and percentage of patients reaching a measured ending.
- On average, services show significant improvement in both percentage of patients reaching measured ending and percentage patients improved regardless of whether they have been using CORE System for 1 or 3 years
- Using only pre- and post-therapy measurement, on average it took early services about 3 years to reach the 70% patients with measured ending level - which gives a reasonably high level of confidence in the percentage of patients improved.
- There are strong indications that services adopting the CORE System more recently raise performance faster than services who adopted the CORE System earlier - achieving 70% patients reaching a measured ending in a little more than a year.
- Some services fail to raise the percentage of patients reaching a measured ending from their initial very low levels even after several years.
- Some services are now achieving over 90% measured endings and 80% patients improved.

## What to measure and how frequently

The quality or performance of a service can be tracked on a number of possible measures (e.g., number of patients seen, number improving, number recovered, etc.) and at a variety of different intervals (e.g., daily, weekly, monthly, quarterly, annually).

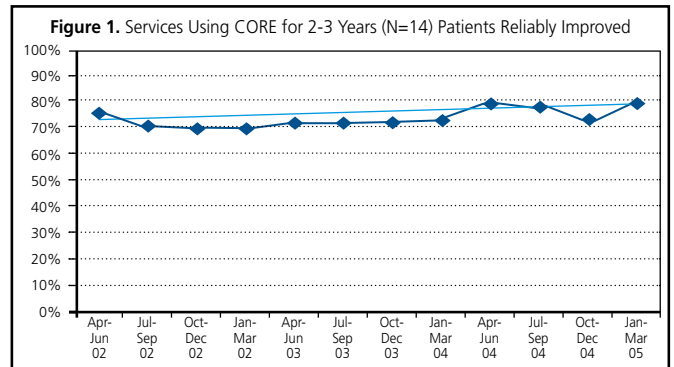
The arguments for using percentage patients improved rather than patients recovered as a primary measure of service performance are set out in CORE Partnership Occasional Paper No 2.

The frequency of measurement adopted in the analyses presented in this paper is quarterly. Measurement every quarter is adopted on the grounds that annual figures are too infrequent to provide useful feedback to service management, and monthly or weekly figures are too subject to random variation given the relatively small numbers of patients being seen.

## Services using CORE for 2-3 years

Figure 1 shows the percentage of patients achieving reliable improvement quarter by quarter (dark blue diamonds) for primary care psychological therapy services who have used the CORE System for between 2-3 years.

As the light blue linear trend line shows, the average has risen from around 70% to about 77% patients improved over the 2/3 year period.

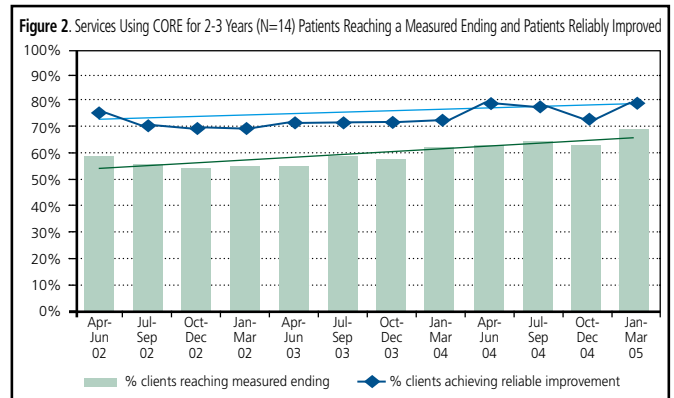


## Confidence in the percentage of patients improved

As discussed at length in CORE Partnership Occasional Paper No 2, how much confidence we can have in the percentage of patients improved depends critically on the percentage of patients reaching a measured ending. To calculate change requires both pre- and post-therapy measures to be completed.

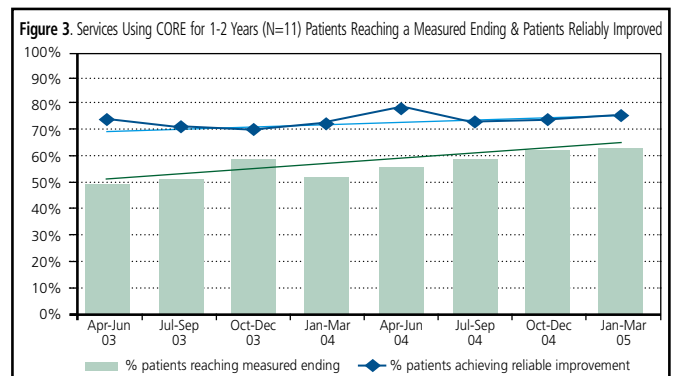
With this in mind, Figure 2 looks at both the percentage of patients improved and the percentage of patients reaching a measured ending quarter by quarter.

Crucially, the percentage of patients reaching a measured ending has risen from around 55% to almost 70% - at which level we can have a fairly high degree of confidence in the percentage of patients improved - which has risen from around 70% to nearer 80%.



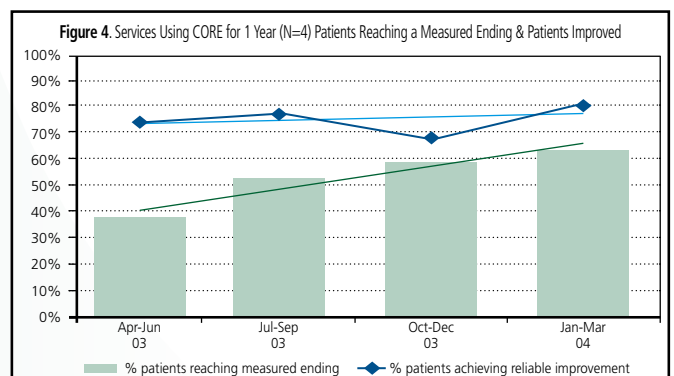
## Services using CORE for 1-2 years

Figure 3 presents services using the CORE System for 1-2 years and shows less overall improvement. The percentage of patients reaching a measured ending has risen from 50% to a little over 60% whilst the percentage of patients improved has risen from around 70% to 75%. These services are not yet at the level where we can have full confidence in the figure for percentage of patients reliably improved. The rate of improvement (per quarter) is about the same as for services using the CORE System for 2-3 years.



## Services using CORE for 1 year

Services who have adopted use of the CORE System more recently appear to have learned from the experience of earlier users (see Figure 4). In From a lower starting level the percentage of patients reaching a measured ending has risen to over 60% in only a year whilst the percentage of patients improved is approaching 80%.



## The 'typical' service

Of course, the overall figures hide considerable differences between individual services. A 'typical' service (if such exists?) is illustrated in Figure 5 by Service 41 which has been using the CORE System for 3 years. The percentage of patients improved has averaged around 75% over the 3 years - but with the variation about the mean diminishing. Over the same period the percentage of patients reaching a measured ending has climbed to around 70% - at which level confidence in the percentage of patients improved is fairly high.

## Recent CORE System user

Service 87 (see Figure 6) who adopted the CORE System more recently shows a more rapid climb - over 5 quarterly periods - to 70% of patients reaching a measured ending. At the same time the percentage of patients improved appears to have climbed to the 80% level.

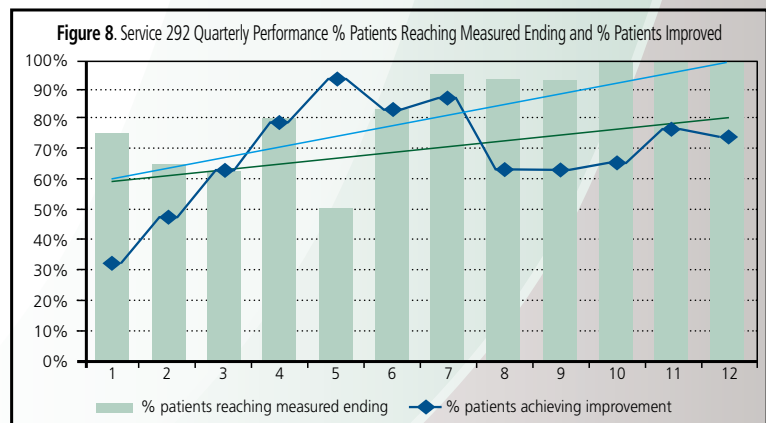
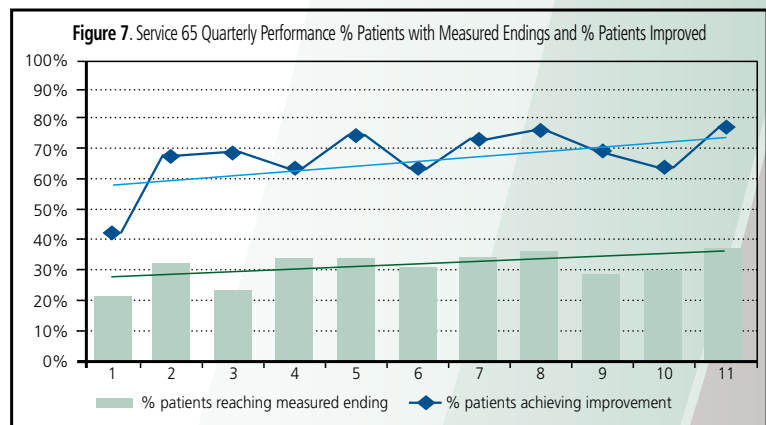
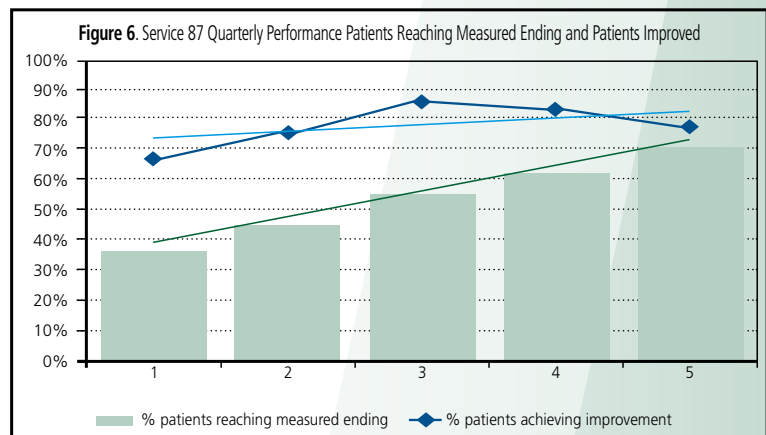
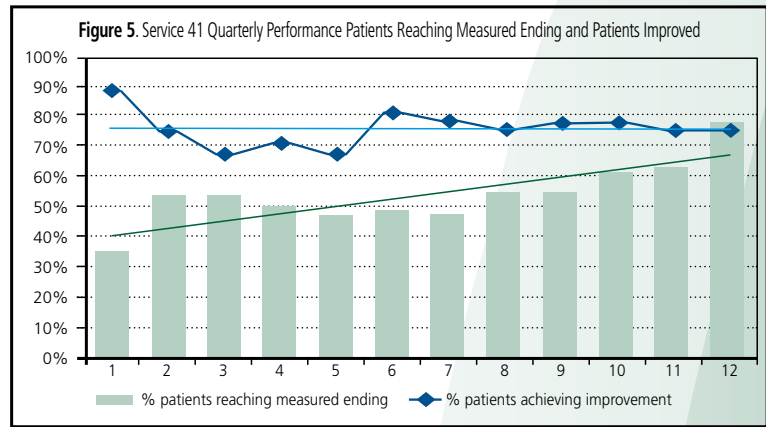
## Low performing services

The majority of services initially show only a low percentage of patients reaching a measured ending. Some practitioners are actively opposed to the idea of measurement and many are not at all enthusiastic about completing 'yet more paperwork', particularly paperwork which potentially could be used to measure their performance as a practitioner. It usually takes considerable effort on the part of the service manager to get all the practitioners co-operating in the completion of outcome measures.

Service 65 presented in Figure 7 is, sadly, not untypical of those services where little real progress is achieved because practitioners continue to refuse to engage. Although the percentage of patients reliably improved appears to have grown from around 60% to nearer 80% the level of patients reaching a measured ending remains so low that there can be little confidence in the percentage of patients improving.

## The high performing service

The services from which we have most to learn are those like 292 (see Figure 8) who have managed to achieve such a high level of commitment from the practitioners that pre- and post-therapy measures are now regularly obtained for 100% of patients treated whilst the level of patients reliably improved has climbed to 80%.



## Key References

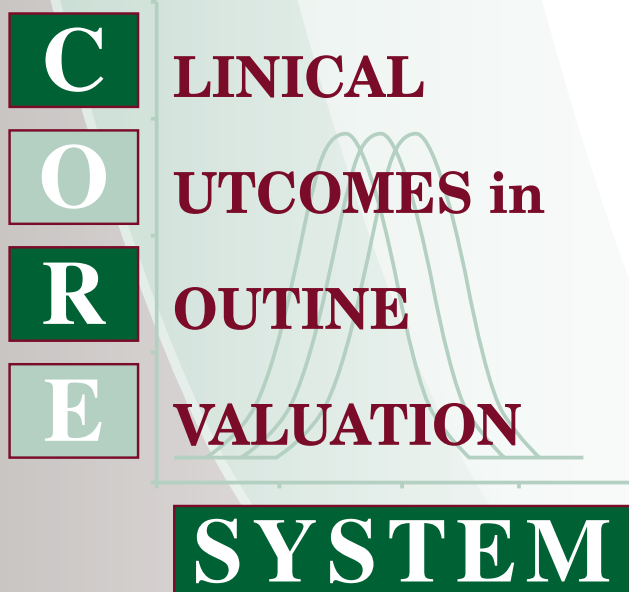
Barkham, M., Mellor-Clark, J., Connell, J., and Cahill, J. (2006). A core approach to practice-based evidence: A brief history of the origins and applications of the CORE-OM and CORE System. *Counselling and Psychotherapy Research*. 6(1): 3-15.

Bewick, B. M., Trusler, K., Mullin, T., Grant, S., Mothersole, G. (2006). Routine outcome measurement completion rates of the CORE-OM in primary care psychological therapies and counselling. *Counselling & Psychotherapy Research*, 6(1): 50-59.

Evans, R., Mellor-Clark, J., Barkham, M., and Mothersole, G. (2006). Developing the resources and management support for routine evaluation in counselling and psychological therapy service provision: Reflections on a decade of CORE development. *European Journal of Psychotherapy and Counselling*. 8(2): 141-161.

Mellor-Clark, J., Curtis Jenkins, A., Evans, R., Mothersole, G., & McInnes. (2006). Resourcing a CORE Network to develop a National Research Database to help enhance psychological therapy and counselling service provision. *Counselling & Psychotherapy Research*. 6(1): 16-22.

Mullin, T., Barkham, M., Mothersole, G., Bewick, B.M., & Kinder, A. (2006). Recovery and improvement benchmarks in routine primary care mental health settings. *Counselling & Psychotherapy Research*. 6(1): 68-80.



## CORE Partnership Occasional Papers

The Occasional Papers are aimed at the development of best practice in mental health care, particularly in the provision of the 'talking therapies' or psychological therapy services. They are based on practice based evidence gained in the routine use of the CORE System in clinical settings rather than randomised control trial based evidence. The primary readership is seen as practising clinicians and service managers. Given the nature of the data and the intended clinical practice based use of the evidence the papers rely on visual interpretation of data rather than more rigorous statistical analysis. We hope that they will be seen as complementary to academic papers.

Feedback on the papers is welcomed, particularly from practising clinicians or service managers and should be initially directed to [riche@coresystemtrust.org.uk](mailto:riche@coresystemtrust.org.uk) Clinician/service feedback is seen as being as effective a mechanism in building a consensual body of practical clinical knowledge (based on evidence gained in clinical practice) as conventional peer review - and more appropriate in encouraging 'ownership' of the knowledge by practising clinicians.

In taking action based upon the evidence provided by the papers it should be borne in mind that the interpretation of the evidence may be revised either in the light of feedback or as further data becomes available (it is planned to update the CORE National Research Database - and thus the content of papers - about every 18 months).

CORE Partnership  
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### Appropriate citation:

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