

OUTCOME MEASURES IN PSYCHIATRY

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SUMMARY

Background: There is a need for outcome measurement in Psychiatry.

Method: A Literature Review was carried out.

Results: A number of different methods for outcome measurement were identified; their depended on the aims of the outcome measurements, hence functional outcomes of services could be measured, including numbers of patients returned to employment or education. Some tools could measure administrative outcomes of service; these include HONOS and HONOS-pbr, while symptom rating scales, some of which could be used by patients and some by clinicians would be used with individual patients to measure patient improvement. Recovery tools included measures of patient understanding and empowerment.

Discussion: These different forms of outcome measurement are complementary, not mutually exclusive.

Conclusion: A range of outcome measures should be used in services, since all the above approaches complement each other. This methodology will give a global assessment of the efficacy of a mental health service in the real world.

Key words: outcome measures - functional outcomes - rating scales

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Introduction

Outcome measures are becoming increasingly important in Psychiatry.

As we attempt to improve and sometimes re-invent the structures of mental health services, moving them into the community and attempting to apply new knowledge about mental illnesses to the design of our services it becomes more and more important, in order to justify the increased expenditure on services to be able to measure outcomes in order to demonstrate that services are good value for money.

There is, however, concern that Psychiatrists in England do not routinely use outcome measures in their practice (Gilbody et al. 2002).

There are various forms of outcome measurement, and each of these serve a different purpose.

Functional Outcome measurement

One form of outcome measurement is the measurement of 'functional outcomes'. In this form of outcome measurement, we establish a number of measures of outcome and audit the service against them. Thus, in a service for patients with first episode psychosis, we audited the following criteria (Agius et al. 2009);

- Client's mental state will improve (By BPRS, PANNS, or KGV).
- Client's social needs (i.e. housing, support, food etc) will be met.
- Post Psychotic Depression will be addressed.
- Clients will return rapidly to employment or education.
- Clients will continue taking medication throughout the three years of the intervention.

- Medication use will be optimised, including due care of side effects and early use of clozapine if appropriate.
- Relapse rate will be reduced.
- Suicide rate will be reduced.
- Use of the mental health act will be reduced.
- Clients and families will have an increased understanding of psychosis and how to prevent it.
- Families and carers will receive the support they need and high EE will be reduced.
- Illicit drug use is reduced.

We were able to compare the outcomes of different services by auditing these criteria.

Measuring Administrative Outcomes

A second form of outcome measurement is that using scales, such as the HONOS (Health of the Nation Outcome Scales) scales (Wing 1996), which are a series of different scales rated 0-4 which measure different aspects of the patient's care. These scales are used mostly to compare the outcomes of different units in the service. They are also going to be used in order to describe the difficulty in treating different groups of patients, in order that 'Payment by results' can be implemented in Mental Health, and patients can be clustered into groups according to severity. In other words, these tools are useful for administrative purposes, but are not sufficiently accurate to adequately describe symptomatic improvements in individual patients.

Because HONOS includes both social outcomes (e.g. Housing, employment) as well as clinical outcomes (symptom reduction) these scales can tend to obfuscate the clinical effect, by drawing attention to improvement in social issues, thus leading.

To a lack of ambition in optimising treatment both with medication and psychological interventions.

Therefore HONOS should never be used alone, But always in conjunction with one or more clinical symptom reduction scales (from the compendium), which should then be used to help establish the HONOS Score.

HONOS has been further developed to be used in the Department of Health Payment by Results project. This version, called HONOS PbR (Care Packages and Pathways team 2009) is designed as follows; each scale is rated in order from 1 to 18 2) Do not include information rated in an earlier scale except for scale 10 which is an overall rating 3) Rate the MOST SEVERE problem that occurred 4) All scales follow the format:

- 0 = no problem
- 1 = minor problem requiring no action
- 2 = mild problem but definitely present
- 3 = moderately severe problem
- 4 = severe to very severe problem

Rate 9 if Not Known

The items in the scales are rated as follows;

1. Overactive, aggressive, disruptive or agitated behaviour (current)
2. Non-accidental self-injury (current)
3. Problem-drinking or drug-taking (current)
4. Cognitive problems (current)
5. Physical illness or disability problems (current)
6. Problems associated with hallucinations and delusions (current)
7. Problems with depressed mood (current)
8. Other mental and behavioural problems (current)
9. Problems with relationships (current)
10. Problems with activities of daily living (current)
11. Problems with living conditions (current)
12. Problems with occupation and activities (current)
13. Strong unreasonable beliefs occurring in non-psychotic disorders only. (current) •
14. Agitated behaviour/ expansive mood (historical)
15. Repeat self-harm (historical)
16. Safeguarding Children & Vulnerable Dependent Adults (historical)
17. Engagement (historical)
18. Vulnerability (historical)

Thus, as well as measuring outcomes, to manage a service, one should also look at process measures

These may include issues like

1. What medication and dosage are we using
2. What psychological interventions have been applied
3. What side effects are occurring
4. What is the change in mental state which links the measure of process back to the measure of outcome.

Measuring Outcomes using Symptom Rating Scales

In order to measure change it is insufficient to just record a list of symptoms.

Change leads to changes in both the number of symptoms and their intensity.

This is why we have to use some sort of 'rating scales' routinely in order to record change. This leads to the recording of data (previously seen as just 'historic') in numerical form; that leads to the possibility of computer analysis of the data as routine practice.

An 'Outcomes Compendium' of Rating scales has recently been produced by the British Department of Health (Bhui et al. 2008). From these, each service chooses a set of instruments, which we use at regular intervals during our work with the client. Ideally, the instruments are used once every 6 months, or when we consider it necessary.

Many of these instruments are rated by the patients themselves, and so are easy to administer. Such Patient Rated Scales are also called PROMS- 'Patient Reported Outcome Measures' (Hunter et al. 2009).

To be able to measure outcomes, we need to first measure how patients were when they first joined the service, i.e. have a baseline, so the first measurement needs to be at the first assessment, when the patient is most unwell.

To be able to measure outcomes in ongoing conditions, we need to establish what the time-span of the measurement shall be, i.e. what have we achieved in x years.

In this way, the outcomes may be compared to those of other patients by the same time.

If the outcome of an episode of care involves care in a number of different units, (e.g. first a crisis team, then a hospital unit, then the EI service), the same outcome measures need to be used across the three teams, and the patient should not be transferred from one team to the next till the outcome change expected of the first team is met or a positive decision is made that an improvement will not occur unless a transfer is made.

Thus, if mental state improvement is the outcome being measured, the first baseline measurement should be done when the patient first presents to the Crisis Team, the same two scales should be used in all the units, and the patient should not be discharged from the hospital unit until it can be shown on these two scales that an improvement in mental state has occurred.

A corollary to this is that if possible the same person applies the scales throughout.

To be able to measure outcomes in ongoing conditions, we need to establish what the expected outcomes are likely to be; Not what we would like them to be ideally, but what we would expect in the real world.

Often, with a new service, no such realistic outcomes are known, so for this AUDIT, one needs a

comparator group from another service to act as a benchmark.

Rating Scales Give us a relatively objective view of what progress we are making in helping the client recover from his episode of illness. They are easy to administer.

When choosing symptom scales always choose A patient administered scale (useful in busy outpatients), to be used in conjunction with a Clinician administered scale.

Recently, when arguing the need for the use of rating scales in one NHS trust, the advantages of using Rating scales, particularly within General Psychiatry (Working Age and Old Age) were described as follows:

1. The intensity of symptoms can be recorded in an at least semi-quantitative way to a degree which is not possible in ordinary history taking.
2. These scales are much more detailed in assessing the clinical state of the patient than HONOS-PbR, and thus can inform the decisions made when filling in HONOS scales to a high degree of accuracy.
3. The choice and uniform use of one or more rating scales for each of the major treatment pathways (e.g. treatment of schizophrenia or depression) will enable each patient to be monitored through each stage of the pathway, and inform the moving of the patients from one stage of the pathway to another; this is especially important now that each treatment pathway includes several different teams, who can thus all rate symptoms in a comparable way (e.g. the treatment pathway for schizophrenia may include the following teams; ASPA, Crisis and Home Treatment, Early Intervention, CMHT, and AOT teams, who would all record symptom improvement in the same way). Thus rating scales will inform the decision to move patients from one step of the pathway to another.
4. Thus rating scales would be used when the patient first presents, as a baseline, and then at regular points in treatment, including each major point in treatment, at each time a move from one team to another is considered, whenever patients have important CPA meetings, including when regarding from one cluster to another, and at the end of treatment, to demonstrate the extent to which symptoms have been improved.
5. Symptom rating scales will show improvement both when medication is optimized and when psychological and social treatments are applied, so their use will document the optimization of treatment outcomes by the optimization of medication and the use of psychological and social interventions, and vice versa demonstrate the need for further optimization of treatment, thus helping ensure treatment is optimized and ensure that there are sufficient resources available to optimize treatment. Such data will

also inform discussions with commissioners and the design of services.

The choice of rating scales for each treatment pathway should include both clinician rating scales and patient rated scales, to be administered contemporaneously, so that disparity between clinician's perception of progress and patients perception of progress may be discussed.

The use of symptom rating scales will make possible the optimisation of treatment, including both Pharmaceutical and Psychological and also social interventions.

Measuring Recovery

A final variety of outcome measurement is measurement of recovery, including patient understanding and empowerment.

Recovery (Patel et al. 2009) is about enabling the patient to return to the life style he wishes to have, (employment, education, hobbies, being a contributing member of society) within the limits of his residual disability (e.g. He may need to continue medication). Hence, recovery is a key objective in Mental Health, and also measures social inclusion.

The most important tool for measuring recovery is the Recovery Star (Mental Health Providers Forum 2007). It measures the following parameters;

- Managing mental health
- Self care
- Living skills
- Social networks
- Work
- Relationships
- Addictions
- Responsibilities
- Identity and self esteem
- Trust and hope

The star is designed so that the improvement in the patient's understanding and mastery of illness and his situation can be demonstrated on one piece of paper and that improvement can be demonstrated. The star is rated jointly by the patient and his/her care co-ordinator.

The recovery star is very useful for care co-ordinators to use with clients, and bring to team meetings to evidence progress in recovery, while patients will value their copy as a sign of their progress.

It is important that the measurement of symptomatic recovery by the rating scales as measured by the outcome compendium-which will ensure that optimal treatment has been given - and the measurement of Recovery in the sense of patient 's understanding of illness, empowerment, and autonomy in self management of illness and prevention of relapse are both taken into consideration when patients are considered fit to be discharged from services (The Recovery star is actually published within the Outcomes compendium).

Discussion

Repeated outcome measurement will give a picture of how a particular service user's condition is improving over time. As a consequence, the tool or tools must be used at the entry into the service at repeated intervals during service delivery, and at the exit from the service.

By their nature, assessment tools will probably be filled in by care-coordinators, but the findings of the tools will have to be fed back to the team in detail, and especially to the responsible lead clinician, so that the findings become an important part of the clinical decision making in the team. So training of appropriate staff, indeed of whole teams, will be necessary for the implementation of outcome measurement in services.

In some cases, the outcome measurement tools will in a sense dictate what the service shall attempt to accomplish and how the service must be structured.

It is recommended that the Health Care Commission and Monitor, the Independent Regulator of NHS Foundation Trusts should insist in their assessments of trusts that appropriate use of outcome measurements is being practiced and that an adequate resource of manpower within the teams is in place so that the outcome measurement can be carried out effectively. Finally and most importantly, outcome measurement must be seen as a key element in the functioning of services, and the measures must be seen as a central part of the work of services, informing decision making about the care of individual services and the functioning and design of the services themselves.

Conclusion

The measurement of symptomatic recovery by the rating scales as measured by the outcome compendium-

which will ensure that optimal treatment has been given - and the measurement of Recovery in the sense of patient 's understanding of illness, empowerment, and autonomy in self management of illness and prevention of relapse, and the administrative measurement of outcomes in order to assess payment and effectiveness of services are all important aspects of the care of patients, and all need to be taken into consideration when patients are considered fit to be discharged from services.

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