ESTABLISHING OUTCOME MEASURES FOR SHARED CARE IN THE TREATMENT OF DEPRESSION

Jenny Hopwood¹ & Mark Agius²

¹Addenbrooke’s Hospital, Hills Road, Cambridge, CB2 0QO, UK
²Cambridge University Department of Psychiatry, South Essex Partnership University Trust, Clare College Cambridge, Cambridge, UK

SUMMARY

Collaborative care between general practitioners and mental health specialists has been shown to improve the care of patients with depression in primary care and may be an important development in mental health services. Outcome measures are becoming increasingly important in psychiatry as we attempt to alter and improve the structure of services. In this article we propose a series of outcome measures that can be used to measure the effectiveness of shared care for patients with depression including objective measures of improvement in psychopathology and subjective measures of patient and professional experience.

Key words: collaborative care – depression - outcome measures

INTRODUCTION

Shared care of patients with depression involves collaboration between primary care and specialist mental health services in order to optimise management of patients. There are a number of models for provision of shared care, but all involve an integrated approach incorporating a general practitioner, mental health specialist, and a case manager, who provides regular contact with the patient and psychosocial support. For shared care to be effective there must be easy access to consultation for all professionals involved, a shared responsibility for care of the patient, structured patient management plans and common protocols between primary and secondary care, with clear instructions of the roles of all professionals involved.

Since Katon and colleagues (Katon 1995, 1996, 2001, 2004, 2005) demonstrated that shared care models of treatment in depression were effective in improving outcomes in the United States, there have been few studies which have attempted to replicate this finding in England, where the services are structured quite differently. Present NICE guidelines advocate a stepped care model, where patients move from primary care to secondary care in a series of steps. This is quite a different model from a shared care system.

Our group have for some time been advocating a shared care approach (Agius 2010, 2011). We have demonstrated that training General Practitioners to identify and treat depression is different from a shared or collaborative care approach (Agius 2011).

In the meantime, some studies of shared care have been developed in the United Kingdom.

Chew-Graham demonstrated that in depression in older people (Chew-Graham 2007) collaborative care in a primary care setting is more effective than GP care as usual. Hence, the implementation of a collaborative care model is feasible in UK primary care and the intervention is both effective and acceptable to patients (Chew-Graham 2007). Richards et al (Richards 2008) carried out a study of Collaborative care in depression, within primary care. The 'collaborative care' consisted of case manager-coordinated medication support coordinated by a case-manager, brief psychological treatment, and enhanced specialist and GP communication (Richards 2008). Reduction in Depression symptom scores were the primary measure of outcome, and was measured by measuring PHQ-9 scores (Richards 2008). It was concluded that ‘Collaborative care is a potentially powerful organizational intervention for improving depression treatment in UK primary care, the effect of which is probably partly mediated through the organizational aspects of the intervention’ (Richards 2008). A further trial which has reported is a trial of treating depression and anxiety. However much larger trials have been reported to be necessary. Metanalyses have been carried out which have shown that depression and anxiety are better treated using a collaborative care model (Archer 2012, Bower 2006). Other studies are presently being planned or carried out (Richards 2009, Coventry 2012).

We agree with Richards that a much larger study is required (Richards 2008).

Many services in the UK, including mental health services, are under pressure to move from a hospital to community base. Outcome measures are becoming increasingly important in psychiatry as we attempt to improve the structure of services to allow this. Evidence suggests that collaborative or shared care models can improve patient outcomes within a primary care setting. However, shared care is not widely used for management of patients with depression in the UK, though pilots are underway. In order to measure the effectiveness of shared care we need outcome measures that can be used to assess the performance of shared care compared with care as usual in primary care. We
propose a series of outcome measures that can be used for this purpose.

One of us has written extensively on different types of outcome measures, and we apply the understanding gained from previous work to working with shared or collaborative programs for the treatment of depression (Agius 2010, 2012).

**OUTCOME MEASURES IN SHARED CARE**

Outcome measures can include measurements of subjective patient, carer and doctor experience as well as objective improvements of mental health. Each allows measurement of a specific factor at baseline and at intervals during use of a service and allows us to assess improvements that the intervention has made.

**Measurements of Psychopathology**

Objective measurements of improvement in psychopathology of patients taking part in the shared care service include:

- Rating scales
  - This could most easily be serial measurements of Patient Health Questionnaire-9 (PHQ9) as this is already widely used in general practice in the UK and is very quick and easy to complete.
  - Alternatively more comprehensive rating scales could be used including the Beck Depression Inventory.
  - Rating scales provide easy ways to obtain quantitative data on change in mental health over time.
- Severe symptoms
  - Suicidal ideation is a distressing and disabling symptom of depression and obviously leads to increased risk of deliberate self harm or death. By measuring and recording the prevalence of suicidal thoughts or attempts amongst patients using the shared care service we can measure improvement in psychopathology. We have previously used such guidelines to assess the effectiveness of a Community mental health team in treating depression (Agius 2010).
- Hospital Admissions
  - The aim of improving a community service is to help people receive their care at home and to avoid acute admission to hospital. Hospital admission suggests crisis with severe psychopathology and a reduction in admissions could be used as a measure of improved mental health or improved ability of a service to safely care for unwell patients at home.
- Measuring recovery
  - This can be done with rating scales and clinical assessment, and can include both symptomatic and functional recovery in terms of social networks, work and relationships.

**Measurements of adherence to evidence based guidelines**

One aim of a shared care service is to ensure that all patients are treated in adherence with evidence based medicine. Protocols and guidelines should be shared between all professionals in primary and secondary care and be readily accessible. Adherence to these guidelines in terms of assessment and management can be audited. Measures of the audit could include:

- **Appropriate treatment**
  - Audit of the treatments provided by the shared care team when compared with guidelines provides a good assessment of the care patients receive.
- **Duration of treatment**
  - Assessment could be made of whether patients are treated for a minimum of six months following resolution of symptoms, as advised by NICE (2009).
- **Patient follow-up**
  - Frequency of follow-up could be assessed to ensure that patients are being monitored and supported appropriately.
- **Are patients with bipolar disorder appropriately identified and treated?**
  - Misdiagnosis of bipolar affective disorder as unipolar depression is a common mistake in primary care that can lead to inappropriate treatment with anti-depressants alone and put patients in danger of induction of mania or a mixed state. One of the aims of a shared care system would be to identify these patients and treat appropriately, and would be an important improvement compared with current practice in primary care (Agius 2010). We have previously used this measure to study a Community Mental Health Team.

**Measurements of Cost Effectiveness of the Service**

Shared care services have been shown to be more cost effective when compared with separate primary and secondary care teams. Outcome measures that include cost-effectiveness are vital as the National Health Service has a restricted budget and is the responsibility of all health care providers to provide care in the most cost effective way. Measures of cost effectiveness can include:

- **Price of appointments in shared care versus secondary care**
  - Record of the number and duration of appointments and whether these were in primary or secondary care in the shared care service.
- **Number of referrals to specialist services**
  - Referrals to specialist services are expensive and primary care physicians are under a great deal of pressure to avoid referrals where possible. An increased ability to care for patients in primary care with accessibility to a mental health specialist for advice would lead to a reduction in costs.
Assessment of professional and patient experiences

Qualitative measurement of patient experiences whilst using the service can provide a detailed insight into the benefits and problems with a shared care system. Similar feedback can be obtained from the professionals involved and these opinions can be used to develop and improve the service further. These assessments can take the form of questionnaires, forums or structured interviews. Measurements of patient and professional experiences include:

- Patient satisfaction surveys
  - Patient satisfaction surveys can measure the patient’s opinion on all aspects of using the service including the ease of accessing professionals, acceptability of waiting time for appointments, feelings of control and empowerment in managing illness, overall opinion of care, and a wide range of other factors. These provide a valuable insight into the experience of using a service, which is extremely important to improve patient experience and maximise engagement with services. Medication support and psychotherapeutic support have been shown to be successful in the context of shared care (Richards 2006). Patient feedback has caused improvements in telephone delivered support including improved flexibility (Simpson 2008) in one shared care protocol.

- Quality of Life
  - Measurements of quality of life assess subjective improvement in well-being following use of a service. Quality of life includes a range of health and social factors including hobbies, relationships, social networks, sense of self-esteem and work. Improving quality of life is an important aim of any mental health service. Such ‘Functional Measures’ have been used by our team in the past to assess the effectiveness of an early intervention in Psychosis service (Agius 2009).

- Qualitative assessment of experience of professionals
  - This should include the opinions of all professionals involved in the service and provide an insight into the differences between the shared care model and care as usual.

- Drop out rates of treatment
  - Drop out rates from follow-up and treatment can be measured as a marker of patient engagement and satisfaction with services.

CONCLUSION

We have presented a range of outcome measures that can be used to assess improvement in patient psychopathology, patient experience, professional experience, cost effectiveness and adherence to evidence based guidelines following implementation of a shared care services. We hope to use these measures to assess a trial of shared care for patients with depression in Bedfordshire. Using these comprehensive outcome measures data can be obtained on the impact of changes in mental health care structures and ensure that we improve services to provide the best care for patients.

Acknowledgements: None.

Conflict of interest: None to declare.

References


randomized controlled trial of collaborative care for depression in people with diabetes and/or coronary heart disease. Trials 2012; 20:13-139.


Correspondence:
Dr Jenny Hopwood, FY2 Doctor
Addenbrooke’s Hospital
Hills Road, Cambridge, CB2 0QQ, UK
E-mail: Jenny.hopwood@cantab.net