Costing statement: Psychosis with coexisting substance misuse

Introduction

This costing statement discusses the cost implications of implementing the recommendations made in ‘Psychosis with coexisting substance misuse: assessment and management in adults and young people’ (NICE clinical guideline 120). While it is not possible to quantify the impact on resources by implementing these recommendations to a reasonable degree of certainty, some of the resource impact issues to be considered locally are discussed here.

The NICE guideline has been developed to advise on the assessment and management of adults and young people with psychosis and coexisting substance misuse. The recommendations offer best practice advice on the assessment and management of adults and young people (aged 14 years and older) who have a clinical diagnosis of psychosis with coexisting substance misuse.

Costs and savings are expected to vary according to local practice. NHS organisations and local authorities are advised to assess what additional resources are needed locally, and the subsequent level of costs or savings that may be expected in their area.

Background

The term psychosis is used to describe a group of severe mental health disorders characterised by the presence of delusions and hallucinations that disrupt a person’s perception, thoughts, emotions and behaviour. The main forms of psychosis are schizophrenia, bipolar disorder or other affective psychosis.
Substance misuse is a broad term encompassing, in this guideline, the harmful use of any psychotropic substance, including alcohol and either legal or illicit drugs.

An understanding of the link between psychosis and coexisting substance use would greatly assist the development of treatment approaches. However, there is limited current knowledge on this issue (Blanchard et al. 2000). Substance misuse among individuals with psychiatric disorders is associated with significantly poorer outcomes than for individuals with a single disorder.

Approximately 40% of people with psychosis misuse substances at some point in their lifetime, at least double the rate seen in the general population. In addition, people with coexisting substance misuse have a higher risk of relapse and hospitalisation, and have higher levels of unmet needs compared with other inpatients with psychosis who do not misuse substances.

**Epidemiology**

It is difficult to estimate the comorbidity between substance misuse and psychosis for a number of reasons. Substance misuse is not a category within the diagnostic classifications. Operational definitions used in contemporary literature tend to differ with some studies investigating the relationship between schizophrenia and substance misuse, and others cover a broader definition of psychosis that includes bipolar disorder. It is also difficult to distinguish between substance use, misuse and dependence.

A consistency in the pattern of substance use in psychosis has been established in the UK. Alcohol is the most commonly used substance, and cannabis the most common drug, with polysubstance use frequently occurring (Weaver et al., 2003).

The annual prevalence of substance misuse among those diagnosed with a psychotic disorder has been found to vary between studies within a range of 24–44%. It is difficult to obtain an estimate for this, as most studies report lifetime prevalence rather than an annual prevalence rate.
In the UK, the annual prevalence for probable psychotic disorder among adults living in private households is about 5 per 1000 (NICE clinical guideline scope: Psychosis with coexisting substance misuse). Therefore, the annual prevalence of psychosis and coexisting substance misuse can be estimated to be around 2 per 1000. Applying this prevalence to people aged over 14 years equates to around 80,000 people in England.

The prevalence and pattern of substance misuse among people with a psychosis will vary between geographical locations in ways that are most likely to be explained by local patterns of substance misuse in the local population. This will be influenced by local supply and availability.

**Current treatment and management in the NHS**

A major problem in the treatment and management of psychosis and coexisting substance misuse (PSM) is that services fail to treat both problems, hence the need for a comprehensive assessment and package of care.

In UK service configurations, treatment philosophies and funding streams do not tend to support the provision of an integrated model (where psychosis and substance issues are addressed at the same time, in one setting, by one team). Mental health and substance misuse services are separate. They are often provided by different organisations, and even when both are provided by the same NHS Trust they usually have different organisational and managerial structures. Furthermore, staff in one service often lack the knowledge and skills necessary for working with people requiring the other service. There has been a tendency for people to be ‘bounced’ between services – where a service specialising in one condition has asked a person with PSM to deal with their other condition first and vice versa.

The differing treatment philosophies for mental health and substance misuse services can also make it difficult for people to receive coherent treatment.

Antipsychotic drugs are generally used to manage the symptoms of psychosis – please see the NICE clinical guideline on Schizophrenia (CG82; 2009) for a guide to the use of these drugs. However, it is recognized that there is
significant local variation in the treatments offered for this population. Recommendations for the management of bipolar disorder are set out in NICE clinical guideline Bipolar disorder (CG38; 2006). Recommendations for treatments for addiction are set out in a number of NICE guidelines, including Alcohol-use disorders (CG 100; 2010), Drug misuse: opioid detoxification (CG52; 2007) and Drug misuse: psychosocial interventions (CG51; 2007). Due to a lack of clinical evidence, further recommendations have not been made in the guidance for pharmacological treatments for people with psychosis and coexisting substance misuse specifically.

In some areas, dual-diagnosis practitioners/teams have been developed to support the delivery of more integrated care. Models vary in different localities, but typically their work includes delivering staff training and supervision, and engaging in joint work with colleagues in mental health and substance misuse services.

People with psychosis and coexisting substance misuse often have multiple needs related to their psychosis and substance use. For example, they often have physical health problems, financial difficulties, housing problems, difficulty in caring for their children and are involved in illegal activity. As a consequence, they are likely to have contact with a variety of services, only some of which will be provided by the NHS, and covered by the guidance.

**Current costs**

To date, no single UK study has attempted to estimate the combined total costs to healthcare and society of treating people with a diagnosis of psychosis and coexisting substance misuse. In 2007, the total health service costs of severe mental illness (schizophrenia; bipolar disorder and related conditions) were estimated at £3.8 billion, while the total costs of lost employment were estimated at £5.4 billion (McCrone et al. 2008). Based on UK-based estimates of prevalence rates of between 36–44% for people with comorbid substance misuse (Menezes et al. 1996; Weaver et al. 2003), it is possible that the total annual health service and productivity costs of psychosis and substance misuse could be between £3.3 billion and £4 billion.
However, given that it is known that hospital episodes may be twice as long for people with psychosis and coexisting substance misuse when compared with people with psychosis alone, the costs are likely to be higher for people with both conditions.

A study (McCrone et al. 2000) involved the collection of service-user data over a six-month period including core psychiatric services, general healthcare, social, education, employment and legal services, for people with psychosis and coexisting substance misuse. Core healthcare costs (including psychiatric inpatient episodes, contacts with mental health staff and emergency and day care attendances) were found to average £2,626 for the six-month period. Total costs, including supported accommodation, social and legal services, were £3,913 for the six-month period. The core healthcare costs were found to be significantly higher than those for people with psychosis alone. However the total costs, although higher, were not significantly so.

**Resource impact of implementation of the guidance**

The lack of empirical evidence for this specific patient population group affected the level of detail that could be included in the recommendations. In addition, little research is available to determine how healthcare professionals should work together to provide the most appropriate care and treatment for people with psychosis and coexisting substance misuse. The evidence that is available has generally been collected in different countries, where healthcare systems and professionals may be very different to the UK. Consequently evidence cannot always be extrapolated. Recommendations were made in the following areas:

- Principles of care.
- Recognition of psychosis with coexisting substance misuse.
- Primary care.
- Secondary care mental health services.
- Substance misuse services.
- Inpatient mental health services.
- Staffed accommodation.
- Specific issues for young people with psychosis and coexisting substance misuse.

There may also be costs associated with healthcare professionals becoming more aware of psychosis and substance misuse, and the appropriate treatment required for both aspects of the condition. This is because currently some patients may be excluded from treatments because of their dual diagnosis. Initial investment into the healthcare services provided to people with psychosis and coexisting substance misuse is likely to lead to savings and benefits in the future, which are discussed in the next section.

The following costs may need to be considered in order to calculate a local cost impact:

**Training**

Many of the recommendations focus on the competence of the healthcare professionals. Training should be available to all staff who routinely come into contact with people with psychosis and coexisting substance misuse, including those working in community mental health teams, inpatient services, assertive outreach teams, early intervention teams, crisis resolution teams, primary care, mental health services for older people, independent mental health projects, accommodation services, day care services, statutory drug and alcohol services and independent drug and alcohol service providers. Training must include medical as well as nursing, social work, psychology, occupational therapy and non-professionally qualified staff (Department of Health 2002). The training needs of staff will vary according to which part of the service they work in. Therefore, organisations are encouraged to assess the training needs of staff in their area. It is anticipated that any costs may be covered through incorporating such training into continuing professional
development. In the current climate, anecdotal evidence suggests that only limited training is provided. However the responsibility of organisations is not absolved and it should be ensured that the workforce has received a sufficient level of training so as to meet requirements of the guidance.

**Secondary care mental health services**

For most adults with psychosis and coexisting substance misuse, treatment for both conditions should be provided by healthcare professionals in secondary care mental health services, such as community-based mental health teams (recommendation 1.4.5).

In order to obtain an adequate assessment of the severity of the condition and the level of treatment required (recommendations 1.4.9–13), there may be an increase in the number of appointments for patients who have been referred to secondary care mental health services. There may also be an increased number of referrals from primary care as a result of recommendations in this area.

The table below shows the cost of face-to-face appointments with a community based mental healthcare team and with the drug and alcohol team (NHS 2010). Joint working between these two teams is recommended in certain circumstances.

**Table 1 National average unit cost for face-to-face appointments with service users**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>National average unit cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>MHCT2</td>
<td>MHCT: adult – other services community team</td>
<td>£135</td>
</tr>
<tr>
<td>MHST31</td>
<td>MHST: drug and alcohol teams</td>
<td>£95</td>
</tr>
</tbody>
</table>

**Inpatient mental health services**

There are likely to be costs associated with providers of inpatient services putting policies and procedures into place that support the treatment of people who have substance misuse problems. These include ensuring an alcohol-
free and drug-free environment is maintained. It is likely that some providers will already have such policies in place.

It is not possible to accurately estimate any change in the length or number of inpatient episodes as a result of implementing the guidance.

The table below shows the likely costs of inpatient episodes per occupied bed day (NHS 2010):

**Table 2 Costs of inpatient mental health episodes per occupied bed day**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>National Average Unit Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>MHIPA1</td>
<td>Adult : intensive care</td>
<td>£613</td>
</tr>
<tr>
<td>MHIPA2</td>
<td>Adult : acute care</td>
<td>£304</td>
</tr>
<tr>
<td>MHIPA3</td>
<td>Adult : rehabilitation</td>
<td>£274</td>
</tr>
<tr>
<td>MHIPC1</td>
<td>Children</td>
<td>£594</td>
</tr>
<tr>
<td>MHIPE1</td>
<td>Elderly</td>
<td>£310</td>
</tr>
<tr>
<td>SCU2</td>
<td>Low level secure services</td>
<td>£418</td>
</tr>
<tr>
<td>SCU3</td>
<td>Medium level secure services :</td>
<td>£481</td>
</tr>
<tr>
<td>SCU42</td>
<td>High dependency secure provision: mental health/psychosis</td>
<td>£349</td>
</tr>
<tr>
<td>SCU52</td>
<td>Maximum secure unit: mental health/psychosis</td>
<td>£763</td>
</tr>
</tbody>
</table>

**Savings and benefits**

Implementation of the guideline is expected to result in the improved assessment and management of people with psychosis and coexisting substance misuse. More effective treatment and care for this group of people may result in a number of benefits, such as:

- Reduced relapse rates, and hence a reduced requirement for changes in healthcare management.
- Reduced substance misuse and improved psychiatric symptoms.
- Improved adherence to medication and a decreased need for pharmacological intervention.
- A decrease in the number of GP visits and the frequency and length of hospital episodes.
• Reduced mortality, including suicide.

• Improved global and social functioning.

• Improved quality of care and patient/carer satisfaction.

• Decrease in the rate of violence and contact with the criminal justice system.

The benefits listed above may result in savings for the NHS and other government bodies following a period of initial investment to improve current services.

**Conclusion**

It is likely that most areas will not incur a significant resource impact as a result of implementing the guidance. Depending on current local practice, some areas may be currently working in line with recommendations, and others may be working towards them as a result of the Mental health policy implementation guide (Department of Health 2009). Some areas may incur savings due to synergies from joint working arrangements and because of the benefits set out above.

Quantifying the resource impact of implementation to a reasonable degree of certainty is not possible due to uncertainties such as the incidence and prevalence of patients, current practice and regional differences. Local health communities are recommended to investigate their current practice for patients presenting with psychosis with coexisting substance misuse and those diagnosed with the condition. They are also recommended to investigate potential changes in practice after implementation of this guideline.
References

Alcohol-use disorders. NICE clinical guideline 100 (2010). Available from www.nice.org.uk/guidance/CN100


