



# Early intervention for people with psychosis

This paper summarises findings of a review of research evidence about early intervention for severe mental illness (Marshall and Lockwood, 2003; Marshall, Lewis, Lockwood, Drake, Jones and Croudace, 2003; Croudace, Jones, Kritzinger, Lennox, Leask, Lewis and Marshall, 2003; Marshall, Lockwood, Lewis and Fiander, 2003).

Research was carried out between Autumn 2001 and Spring 2003.

The research was commissioned by the Department of Health's Policy Research Programme. (See also 'About the study', page 6.)

*Putting research evidence within your reach*

**In the UK some surveys show that it can take up to two years after the first signs of psychosis for individuals and their families to begin to seek or receive appropriate help and treatment (DH, 2000). Reasons for this delay can include lack of awareness, reluctance to seek help, unspecific early symptoms and stigma. And yet getting help early on can be crucial: the first few years of severe mental illness carry the highest risk of serious physical, social and legal harm. One in ten people with severe mental illness commits suicide, and two-thirds of these deaths occur within the first five years of illness (Wiersma *et al.*, 1998).**

'Early intervention' is an innovative approach to mental health care that is attracting worldwide interest. It focuses on prevention as well as treatment, and aims to help patients and their families at a relatively early stage of illness. Expanding national provision of specialist early intervention teams is a key element of the NHS Plan. What then is known so far about the effectiveness of early intervention? And what are the essential elements of early intervention services likely to make a real difference to the care that patients and families receive?

## Key findings

### Key terms

#### Cognitive behaviour therapy (CBT)

a short-term, problem-focused intervention

#### Duration of untreated psychosis (DUP)

the time that elapses between first appearance of psychosis and receiving adequate treatment

#### Family therapy

treating psychological problems in the context of the family

#### Negative symptoms

to do with things that patients neglect which people normally manage, e.g. to concentrate, engage with others, be motivated

#### Phase-specific treatment

treatment targeted in the early stages of illness

#### Positive symptoms

to do with things that patients experience which people normally do not, e.g. delusions and hallucinations

#### Prodromal period

before the onset of serious illness where symptoms are often unspecific

#### Psychosis

when a person is unable to distinguish between what is real and what is not. Common among people with schizophrenia and bipolar disorder (previously known as manic-depression)

See also NIMHE's 'Word Bank' at: [www.nimhe.org.uk](http://www.nimhe.org.uk)

### What is early intervention?

Early intervention aims to promote an individual's recovery from psychosis by:

- prevention
- early detection
- more effective treatment at the beginning of illness.

Elements distinguishing early intervention from standard care are early detection and phase-specific treatment. Both elements may be offered in addition to standard care, or provided by a specialised early intervention team.

Early intervention teams in the UK are expected to meet the needs of:

- people aged between 14 and 35 who show symptoms of psychosis for the first time
- people aged 14 to 35 during the first three years of a psychotic illness.

Sources: Marshall and Lockwood, 2003; DH, 2000

### What does the evidence for early intervention show?

Findings of the review (see 'About the study', page 6) indicated that there was a limited number of robust research trials on early intervention. Only three trials, of different types, were identified that met criteria for inclusion in the review, as follows.

- One trial looked at intervening during the prodromal period. Treatment consisted of the antipsychotic drug risperidone plus cognitive behavioural therapy (CBT).
- The other two trials looked at intervening during a first episode of schizophrenia. Treatment in both trials was family therapy.

The main positive finding was that **people with prodromal symptoms who received a phase-specific intervention (low dose risperidone and CBT) plus care from a specialised team, were significantly less likely to develop psychosis at 6-month follow up than those who only received care from a specialised team.**

There was also evidence that hospital admission rates were significantly reduced for 'first episode' patients receiving a phase-specific intervention (family therapy) plus outpatient care compared to patients receiving outpatient care only. However, further evidence is needed before this and the above positive finding can be firmly established.

Further definitive evidence is therefore needed for the benefits of: early detection and treatment of prodromal symptoms; phase-specific interventions; and specialised teams for a first episode of psychosis.

### Does delay in getting treatment impair recovery?

The review looked at evidence relating to 'duration of untreated psychosis' (DUP) – see 'key terms'. Arguments have been advanced that psychosis can cause lasting damage to health and that a delay in treating psychosis may reduce chances of recovery, while intervening early on could improve recovery chances.

Interpretations of individual studies differed about what implications the DUP had for the course of illness. The review's analysis of data as a whole, however, found consistent

evidence to show that **the bigger the time gap, the more likely patients are to have poorer outcomes across a range of measures**. Further evidence, however, is needed to prove that shortening the DUP leads to improved outcomes.

### Can clinicians predict which patients will develop psychosis?

The review examined evidence about diagnosis in early intervention. It found that **there are promising indications that clinicians can predict who is likely to develop a psychotic illness** among people who are referred to services because others are worried about them. However, definitive evidence in this area has yet to appear.

**Table 1: Essential elements of an Early Intervention Service (EIS)**

Focus of intervention	Element
<b>Client group</b>	<ul style="list-style-type: none"> <li>EIS should deal with people in their first episode of psychosis</li> </ul>
<b>Team structure</b>	<p><i>EIS should:</i></p> <ul style="list-style-type: none"> <li>be composed of staff whose sole or main responsibility is to the EIS</li> <li>have at least one member trained in CBT</li> <li>incorporate medical, social and psychological models</li> <li>emphasise clients' views on their problems and level of functioning</li> </ul>
<b>Team membership</b>	<p><i>EIS should:</i></p> <ul style="list-style-type: none"> <li>include a consultant psychiatrist with dedicated sessions</li> <li>include at least one psychiatric nurse</li> <li>include a clinical psychologist</li> <li>have support from Child and Adolescent Mental Health Services (CAMHS) when prescribing for under 16-year-olds</li> <li>have close links with CAMHS</li> </ul> <p><i>Note</i> There was also good consensus for inclusion of: a social worker, an occupational therapist, and a support worker</p>
<b>Initial assessment</b>	<p><i>EIS should:</i></p> <ul style="list-style-type: none"> <li>assess clients referred on suspicion rather than certainty of psychosis</li> <li>encourage direct referrals from primary care</li> <li>have access to translation services</li> <li>not be concerned about precise diagnosis so long as in psychotic spectrum</li> <li>offer a rapid initial assessment</li> <li>regularly audit effectiveness of referral pathways and training programmes</li> <li>accept referrals from child and adolescent mental health services</li> <li>identify areas of distress</li> </ul> <p><i>An EIS assessment should include:</i></p> <ul style="list-style-type: none"> <li>a psychiatric history and mental state examination</li> <li>a social functioning and resource assessment</li> <li>an assessment of risk (including suicide)</li> <li>an assessment of the client's family</li> <li>the client's aspirations and understanding of their illness</li> <li>an EIS assessment should be multi-disciplinary</li> <li>each EIS client should have a relapse risk assessment</li> <li>the goal of early contact should be engagement rather than treatment</li> </ul>
<b>Engagement</b>	<p><i>EIS should:</i></p> <ul style="list-style-type: none"> <li>have a assertive approach to engaging the client and their family/social network</li> <li>not close the case if client fails to engage</li> <li>allocate a key worker to all clients accepted into the service</li> <li>provide services away from traditional psychiatric settings to avoid stigma</li> </ul>

## What are the essential elements of an early intervention service?

The review carried out a structured consultation with 21 expert health care practitioners to identify essential elements of services and establish how far these were in agreement with national guidance (DH, 2000). The consultation found a high level of agreement with the guidance; elements about which there was a strong consensus among practitioners are set out in Table 1. This level of consensus could assist the development of evaluative tools designed to measure the effectiveness of these elements (see 'About the study', page 6).

Table 1: Essential elements of an Early Intervention Service (EIS) (continued)

Focus of intervention	Element
<b>Non-drug treatment</b>	<p><i>EIS should:</i></p> <ul style="list-style-type: none"> <li>emphasise identification and treatment of depression among clients</li> <li>emphasise identification and treatment of suicidal thinking</li> <li>provide CBT to clients with treatment-resistant positive symptoms</li> </ul> <ul style="list-style-type: none"> <li>provide clients with educational materials about psychosis</li> <li>Each EIS client should have a relapse prevention plan</li> </ul>
<b>Drug treatment</b>	<ul style="list-style-type: none"> <li>EIS should use low-dose atypical neuroleptics as the first-line drug treatment</li> <li>Clients with disabling negative symptoms should have review of drug treatment</li> <li>EIS should actively involve clients in decisions about medication</li> <li>EIS clients should receive detailed information about medication</li> </ul>
<b>Relatives and significant others</b>	<p><i>EIS should:</i></p> <ul style="list-style-type: none"> <li>engage client's family/significant others at an early stage</li> <li>involve family and significant others in client's ongoing review process</li> <li>A relapse prevention plan should be shared with the client's family/significant others</li> <li>provide families with psychoeducation and support</li> <li>provide families with Psychoeducational Family Intervention</li> </ul>
<b>Admission to hospital</b>	<ul style="list-style-type: none"> <li>EIS should have access to separate age-appropriate inpatient facilities for young people</li> <li>EIS should be able to provide intensive community support when a client is in crisis</li> <li>Each EIS service user/family/carer should know how to access support in a crisis</li> <li>EIS clients should be able to access out-of-hours support from a 24-hour crisis team</li> <li>When a client is an inpatient, EIS team should be actively involved in inpatient reviews</li> <li>When a client is an inpatient, EIS team should be actively involved in discharge planning</li> <li>EIS should be prepared to use its powers under mental health legislation</li> </ul>
<b>Community connections</b>	<ul style="list-style-type: none"> <li>There should be a single point of contact so primary care and other agencies can check out potential concerns/resources and ease the confusion of roles/responsibilities</li> </ul>

- There is some promising preliminary evidence to support early intervention but further definitive evidence is needed
- There is a good agreement between views of expert practitioners and national guidance on the overall scope of early intervention services
- Early intervention is a complex area with no single 'blueprint': for the purposes of research, delivery and evaluation it is important to maintain clarity over the essential elements of services
- Effectiveness of early intervention needs to be evaluated in a UK context and in a systematic and nationally coordinated way

### What conclusions can be drawn?

Services have developed rapidly in many countries. **While the study found evidence of a growing body of research and some encouraging findings, the evidence base has yet to catch up with clinical developments.** An insufficient number of trials was identified to give definitive answers, for example, to the following:

- What 'works' with different groups of people during the early stage of psychosis?
- What elements of an early intervention service are critical to its success?

Moreover, none of the trials was conducted in the UK; hence findings need to be interpreted with caution when applied to the UK. Five ongoing trials were identified as due to report shortly, and one of these is a UK randomised control trial of a phase-specific CBT intervention for people showing prodromal symptoms of schizophrenia.

In terms of policy and practice, the study concluded that **early intervention services in the UK have a window of opportunity to link their practice to the findings of ongoing national research.**

While conclusive evidence about aspects of early intervention has yet to emerge, one thing is already clear: the complex nature of psychotic illness – and of 'early interventions' designed to respond to this – makes it likely that no two specialised teams will be identical. Accordingly, care needs to be taken to define the essential characteristics and activities of teams and to monitor and review how frameworks are implemented in practice.

A key task, therefore, of those commissioning and managing services should be to develop a systematic structure of early intervention services. In the absence of such a structure doubts are bound to arise over whether a particular team is 'really practising early intervention', and whether it will deliver the kind of innovation that is required, as well as the intended benefits for patients and families (DH, 1999, 2000).

## Gaps in research

A strong message from the review is that the knowledge base about effective elements of early intervention is relatively sparse. There are now some important questions to be addressed by further research, among which the review highlighted the following:

- 1 Can phase-specific interventions prevent people with prodromal symptoms from developing psychosis and, if so, do they or their carers benefit as a result?
- 2 Can early detection reduce the duration of untreated psychosis, and if so, does this lead to improvements in outcome for service users and carers?
- 3 Are there phase-specific interventions which improve outcomes for people with first episode psychosis, or for their carers?
- 4 Do specialised early intervention teams offer improvements in outcome over and above those provided by phase-specific interventions alone?



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*Early intervention for people with psychosis*

*Putting research evidence within your reach*

#### About the study

This briefing summarises key findings from three reviews and a consultation of expert opinion.

##### *A Systematic Review of the Effectiveness of Early Intervention for Psychosis*

The aim of this review was to examine evidence from published trials designed to: prevent progression to psychosis in people showing prodromal symptoms; or improve outcome for people with first-episode psychosis. Eligible interventions, alone and in combination, included: early detection, phase-specific treatments, and care from specialised early intervention teams. Non-randomised trials were included only if they were studies of the effectiveness of early detection strategies in reducing the duration of untreated psychosis (since this issue cannot be addressed by simple randomisation). Out of a total of 9279 abstracts the review identified only three studies that met inclusion criteria. Trials were conducted in Australia (Melbourne), the Netherlands (Amsterdam) and China (Suzhou), involving a total of 218 patients.

##### *Systematic Review of the Relationship between Duration of Untreated Psychosis (DUP) and Outcome*

The aim of this review was to determine: if there is an association between DUP and outcome for patients presenting in their first episode of psychosis; and how far other variables explain any observed association. A total of 434 papers were retrieved and evaluated, from which 26 relevant cohorts, involving 3957 patients, were identified and analysed.

##### *Early Diagnosis of Schizophrenia and Other Psychoses: an assembly of evidence (to year end 2002) in support of indicated prevention research*

The aim of this review was to determine whether early diagnosis can predict those patients likely to develop severe mental illness. Some 25 studies identified met inclusion criteria. The review identified a need for more comprehensive evaluations of alternate multi-stage and/or multi-modal screening approaches.

##### *Essential Elements of an Early Intervention Service*

The aim of this 'Delphi' consultation was to identify levels of consensus on essential elements of early intervention teams. Views of 21 expert clinicians were gathered via a written questionnaire. Using published guidelines, an initial list was constructed containing 151 elements from ten categories of team structure and function. Overall there was expert consensus on the importance of 136 (90%) of these elements. Of the items on which there was consensus, 106 (70.2%) were rated essential, i.e. in their absence the functioning of the team would be severely impaired. This degree of consensus suggests that it is reasonable to define a model for UK early intervention teams, from which a measure of fidelity could be derived.

#### Further information

*A Systematic Review of the Effectiveness of Early Intervention for Psychosis* (April 2003)  
Max Marshall<sup>1</sup> and Austin Lockwood<sup>1</sup>

The review evaluating the evidence for the effectiveness of: early detection and treatment of people with prodromal symptoms; early intervention teams for people in their first episode of psychosis; and phase-specific treatments for people in their first episode of psychosis

*Systematic Review of the Relationship between Duration of Untreated Psychosis (DUP) and Outcome* (April 2003)  
Max Marshall<sup>1</sup>, Shon Lewis<sup>1</sup>, Austin Lockwood<sup>1</sup>, Richard Drake<sup>1</sup>, Peter Jones<sup>2</sup> and Tim Croudace<sup>2</sup>

A review of the research evidence looking at the relationship between DUP and outcome

*Early Diagnosis of Schizophrenia and Other Psychoses: an assembly of evidence (to year end 2002) in support of indicated prevention research* (April 2003)  
Tim Croudace<sup>2</sup>, Peter Jones<sup>2</sup>, Rudi Kritzinger<sup>2</sup>, Belinda Lennox<sup>2</sup>, Stuart Leask<sup>3</sup>, Shon Lewis<sup>1</sup>, Max Marshall<sup>1</sup>

A review of the research evidence looking at early diagnosis of schizophrenia and other psychoses

*Essential Elements of an Early Intervention Service – the opinions of expert clinicians* (April 2003)  
Max Marshall<sup>1</sup>, Austin Lockwood<sup>1</sup>, Shon Lewis<sup>1</sup> and Matthew Fiander<sup>4</sup>

Findings of a 'Delphi' process to elicit and quantify the opinions of a group of expert clinicians working in UK early intervention teams

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Initiative to Reduce the Impact of Schizophrenia (IRIS) 2000. *Clinical Guidelines and Service Frameworks for Early Intervention*. Available at: [www.iris-initiative.org.uk/guidelines.htm](http://www.iris-initiative.org.uk/guidelines.htm)

Wiersma D., Nienhuis F. J., Slooff, C. J. and Giel, R. 1998. 'Natural course of schizophrenic disorders: a 15-year follow up of a Dutch incidence cohort', *Schizophrenia Bulletin*, 24, 1, 75–85