Contents

1

Section 1
1.0 Executive Summary

Each year across the United Kingdom about 7,500 people will develop a first episode of psychosis (FEP), the onset usually occurring in young people (80% aged 16-30) at the prime of their lives. They can lead to long term problems, sometimes life long, which leave people too often on the margins of society, struggling to maintain relationships, or get a job, an income or a home. As many as 1:10 die by suicide, often within the first 5 years. And their families, friends and communities often carry huge burdens of care.

Reviewing evidence from a growing body of research shows that the early phase of psychosis is well understood. This evidence underpins secondary prevention strategies now being translated into specific programmes for early intervention in psychosis both within the UK and internationally. Prior to these developments there was an average delay of one to two years before people get meaningful and effective help. Currently in the UK access to services who specialise in Early Intervention in psychosis (EIP) is still variable by country and by region. Where no such service exists, then about half of these young people can expect their first contact with mental health services via the police, or by compulsory hospitalisation due to the whole situation having deteriorated so much before there is any useful action.

We now know it does not have to be like this. The first 3 years appear critical, when treatment response is very good, and all the important things that give life meaning and stability, home, work, relationships, are still intact. A group can be identified even before the onset of psychosis (Cannon, Cornblatt & McGorry, 2007), with the so-called At Risk Mental State or ARMS, who have significant disability from a complex array of psychological, emotional and social problems. Despite evidence that this group may be particularly responsive to phase specific interventions they may not fit neatly into conventional service configurations typically being passed from one place to another or falling between services.

Many of the factors influencing the mental well being of these young people lie outside the traditional remit of health and social care. Respect for the person, everyday relationships, family life, social relationships, leisure and useful occupation are as important as therapeutic/symptom change. Equally, awareness raising, tackling stigma and discrimination, providing equal access to opportunities, addressing cultural factors are vital. Social inclusion, engagement and offering not just an abstract or sentimental hope of recovery but practical means to do so are the corner stones of modern service approaches. Indeed the World Health Organisation (WHO) and International Early Psychosis Association embodied these aspirations in the Early Psychosis Declaration (2004). Table 1 provides an extract of the Declaration relating to the interface between primary and specialized services.

The key message here is that starting treatment very early in the pathway can lead to a much better outlook.

This set of resources has been developed to highlight the best evidence and practice around the treatment of early psychosis, particularly focusing on the opportunity provided by detecting and treating those with an At Risk Mental State for psychosis (ARMS). However realising the potential demonstrated by this evidence cannot solely be the responsibility of specialist services. Successful pathways to the right sort of specialised care require us to work together; families, friends, primary care and social services, emergency services, business, voluntary and faith groups, and the media can all help. The report will highlight the need for a whole system response which should espouse the practical achievement of better informed help seeking by young people and families, improved primary care recognition and referral, and specialist services more responsive to these early concerns.

Early psychosis declaration	Relating to primary care
Comprehensive programme	Measured Outcome
Improve access and engagement Walk in responsive services usually provided in primary care settings should be equipped to deal effectively with early psychosis. Service interfaces are designed to support quicker and more effective engagements of young people	The mean Duration of Untreated Psychosis from the onset of psychosis is less than three months The use of involuntary treatments in the first engagement is less than 25 per cent Effective treatment will be provided after no more than three attempts to seek help
Practitioner training All Primary care sites are equipped to deal effectively with early psychosis. Continued Professional Development is supported for all specialist staff working with young people with psychosis	Recognition, care and treatment of young people with psychosis is a routine part of training curricula of all primary care and social care practitioners Specific Early Intervention training programmes are resourced and evaluated

Table 1: Extract from the Early Psychosis Declaration (Betolote and McGorry, 2005)

Section 2
2.0 Introduction

The drive to detect and intervene earlier in the care pathway of an individual with an emerging psychosis is supported by increasingly robust evidence. It is timely, in the light of this evidence and the rapidly changing configuration of mental health services specialising in early intervention, to consider how the key players in the early part of the pathway work together.

This report will explore some of the development challenges for specialist services, illustrating how this emerging evidence base can be translated into the real world by providing examples of good practice in specialist services. In particular we examine how the primary care / specialist interface needs to change if we are to realise the potential benefits of the research evidence.

General Practitioners are critical pathway players in the interface with specialist services. Indeed the Early Psychosis Declaration (2004) draws attention to early detection, care and treatment of young people with psychosis and their families becoming a routine part of the training curricula of all primary (generalist) health and social care practitioners. (See table 1)
The Mental Health Policy Implementation Guide (2002) also highlighted how primary care training programmes should include early detection and how to refer people with potential early psychosis. This document also recognises the need to provide some service for those people where there is a suspicion of psychosis but no firm diagnosis.

Working with experts from the Royal College of General Practice, the Royal College of Psychiatry and the British Psychological Society we have created a specific guidance for general practitioners.

Finally supporting the report we have prepared a set of Factsheets which summarise some of the main themes.

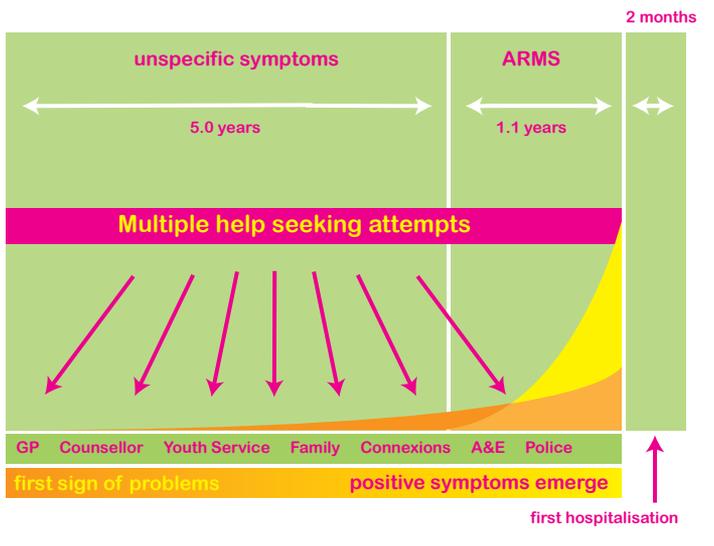## Section 3
3.0 Everybody's business

This section will explore some of the newer whole system thinking that underpins the emerging service models for achieving much earlier intervention. We will particularly focus on the primary care / specialist interface and the role of primary care within the early care pathway.

3.1 Introduction

the degree to which early intervention is, or is not achieved provides a measure of how well service systems interface along the care pathway. However these care pathways are often complex, presenting hurdles at traditional interfaces between primary and specialist care, as well as inter-specialist interfaces e.g. between Children/Adolescents' and Adult Mental Health Services. These potential obstacles are worsened if services are culturally inappropriate or insensitive to youth. Successful pathways to the right sort of specialised care require us to work together; families, friends, primary care and social services, emergency services, business, voluntary and faith groups, and the media can all help.

2 months

unspecific symptoms	ARMS	
← 5.0 years →	← 1.1 years →	↔

Multiple help seeking attempts

GP   Counsellor   Youth Service   Family   Connexions   A&E   Police

first sign of problems   positive symptoms emerge

first hospitalisation

◼ positive symptoms

◼ negative and non-specific symptoms

3.2 Major mental illnesses are frequently a developmental disorder

Our understanding of mental disorders has been transformed over the last two decades by a variety of revolutionary technologies, alongside careful epidemiological and longitudinal research. It is now clear that many of these disorders first manifest themselves whilst the brain is still developing. This can explain why many people, irrespective of syndromic diagnosis, first become ill in adolescence or young adulthood, at a key time of maturation when aspirations such as self-determination, relationships and work may become irreparably damaged. Service models and systems must continuously develop to reflect this changing understanding by responding in a person-centred way.

3.3 Early phase of illness as a critical period

For many of those with psychosis a persistent, disabling and sometimes lifelong condition will ensue. The level of disability increases rapidly in the first couple of years to reach a plateau which then predicts the level of disability at 15 years (Harrison, Hopper, Craig, et al, 2001) and indeed for some the level of disability recedes. In addition suicide poses a particular threat in this early phase; the lifetime risk is 10%, the majority do so within the first five years and especially around the time of first diagnosis. This makes the first 3-5 years a critical period in the care pathway, offering a window of treatment opportunity in which to improve survival and alter the longer term trajectory of illness and disability.

3.4 Prevention is better

Early Intervention has come late to psychiatry in contrast to fields of healthcare such as Diabetes and Coronary Artery Disease. In these conditions securing quick access to high quality treatment has reduced serious long-term morbidity, encouraging both health professionals and the public to take a more optimistic view and radically shift towards health promotion, early intervention, and collaborative management.

3.5 The current specialist service baseline

The evidence for early intervention in psychosis is overwhelming prompting the development of Early Intervention Services (EIS) as a political imperative in England and many countries internationally. By March 2006 about half the population of England could access EIS, (Tiffin & Glover, 2007) and with continued growth in new services subsequently. However access to EIS across the UK still varies by country and by region.

Where clients can only access standard community mental health teams then the reality of what these young people receive can still be characterised as 'too little and too late':

- *Typically these individuals with a FEP experience delays in recognition and treatment of 1-2 years (Johannessen, 2004) by which time the level of illness may well be severe and the engagement driven by risk and problematic.*

- *Excessive delay is a significant contributor to poor response to treatment, recovery and long term outcome (Marshall, Lewis, Lockwood, et al, 2004).*

- *Most are hospitalised initially, in crisis, commonly with traumatic police involvement and use of the mental health act, lengthy hospital stays and coercive inpatient practices (Yung, Organ, Harris, et al, 2003).*

- *Clients and carers too frequently complain about lack of practical help and education about psychosis, whilst clinical attention focuses on treatment issues neglecting personal adaptation, functional recovery, relapse prevention and carer needs.*

- *Unsurprisingly, given the coercive early experiences and stigma, 50% of these young people are 'lost' to follow up within 12m, often to re-emerge in crisis in a relapse.*

- *More than half will relapse by 18 months (Craig, Garety, Power, et al, 2004). And with each relapse, the speed and quality of remission are progressively impaired, whilst the risk of further relapse and persisting symptoms increases (Wiersma, Nienhuis, Sloof & Giel, 1998).*

- *By 5 years, the majority (55%) of patients will be unable to achieve remission from their episodes of psychosis (Robinson, Woerner, Alvir, et al, 1999) and most of the suicides will have occurred (Mortensen & Juel, 1993).*

When even good quality "standard" mental health services are compared with Early Intervention Services (EIS), the latter report shorter durations of untreated psychosis, lower use of legal detention, reduced hospital admissions (Yung, Organ & Harris, 2003), lower relapse rates, (Craig, Garety, Power, et al, 2004) better recovery, better service engagement and client/carer satisfaction and lower suicide rates (Power, 2004). Furthermore the economic impact of EI services modelled over 1 and 3 year periods (McCrone, Dhanasiri & Knapp, 2007) reveal the potential for significant savings when compared to standard care.

- *EI would save £16K per patient over 1 year and £46K over 3 years*

- *The saving is largely insensitive to changes in the cost of the actual EI team*

- *The savings are mainly due to lower readmission rates for EIS*

3.6 Role of primary care

The contribution of primary care is acknowledged in the Early Psychosis Declaration (table 1). In most communities for those with a FEP, the GP will be the first health professional encountered. For an individual GP, diagnosing FEP is uncommon (about 1-2 per year) and yet they are frequently consulted along the developing illness pathways (Cole, Levt, King, et al, 1995). GPs are the most common final referring agency and their involvement also reduces the use of the Mental Health Act (Burnett, Mallett, Bhugra, et al, 1999).

3.7 Integrated care

EI service developments herald a new way of working across the interface to provide better services for people with acute psychosis (both first episode and relapse). EIS share a number of philosophical and clinical concerns with primary care. Both have a low threshold for referral, work with diagnostic uncertainty and are used to seeing and trying to help distressed families. These shared issues provide fertile ground for primary care and EIS working closely together to the common objective of ensuring that a young person and their family access appropriate quality services in a timely fashion. Key issues for primary care are:

- *Greater awareness about key 'alert' indicators for FEP*
- *Acting on family concerns*
- *Low threshold for prompt access to specialist advice and assessment*

Perhaps, above all, where there are concerns it is important to keep an "active watching brief" maintaining wherever possible a line of communication and offer of care through follow up appointments, a home visit or a telephone call.

3.8 Help seeking

Health promotion is an essential strategic component of early intervention. Assisting the public to better understand how psychosis emerges and how to seek effective help in a community-based setting has been shown to successfully reduce the DUP (Larsen, Johannessen, McGlashan, 2000). An important activity for EIS is to educate and support key pathway players in the community on early detection and what actions to take. Such people / agencies include primary care staff, teachers, police and probation, employment, housing and welfare agencies etc.

3.9 Future possibilities

The role of the GP in early recognition is akin to his/her role in early presentations of certain cancers. The challenge is to enhance the importance for GPs of early recognition and flagging up of those with key 'alert' indicators; supported by different access routes to a specialist assessment and treatment service; in this case a youth-orientated specialist assessment and psychological treatment service. Perhaps EIS will need a marketing strategy to sell the 'at risk mental state' concept to GPs? If so then EIS will need to talk 'family practice' and 'young people with an acute mental health crisis' to collaborate through some of the strengths of the middle ground of primary care; namely knowledge of the individual before the onset of psychosis; the ongoing relationship between families and primary care and 'being in it for the long-term'.

3.10 Conclusion

Achieving early intervention in psychosis provides a challenge for primary care which goes beyond improving individual GP competence and knowledge, or raising awareness of new EI treatments and services. The concept of early intervention puts the onus on primary care and other community services to make themselves accessible, non-stigmatising and relevant to young people, whether dealing with a mild and self-limiting depression or a major psychosis. Indeed, such an approach makes sense for all mental illness, not just psychosis where the stakes are arguably the highest. And young people with emerging psychoses and their families should feel confident that primary care services will integrate with specialist services to ensure they receive the highly specialised interventions they require both at the onset of the illness and in the longer-term in a timely fashion. If we achieve that, then early intervention really will have become everybody's business.

4.1 What is psychosis

Psychosis is not, in and of itself, a diagnosis. Some diagnoses involve psychotic symptoms by definition e.g. schizophrenia, whereas others may or may not include psychotic symptoms e.g. depression. In the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV: (American Psychiatric, 1994) the narrowest definition of psychosis is described as a break in reality testing as manifested by delusions or hallucinations which an individual has no insight into. A broader definition would include those hallucinations that an individual understands as to their origin. Broader still, psychosis also includes other positive symptoms of schizophrenia (i.e. disorganised speech, grossly disorganised or catatonic behaviour) (American Psychiatric Association, 1994).

Psychotic symptoms include:

- *Delusions (e.g. unusual beliefs that are not shared by the majority of society and as such are considered as being out of touch with reality)*
- *Hallucinations (e.g. hearing things that other people cannot hear, or seeing things that other people cannot see)*
- *Thought insertion (e.g. the person experiences thoughts as being put into their mind by an external source)*
- *Thought withdrawal (e.g. the person experiences thoughts as being removed by an external source)*
- *Thought broadcast (e.g. the person experiences thoughts as being spoken aloud or heard or read by others)*
- *Thought disorder (e.g. incoherent speech, pressure of speech and poverty of content and flight of ideas).*

Psychotic phenomena such as hallucinations and delusions are most notably linked to diagnoses such as schizophrenia, bipolar disorder and severe clinical depression. Many have described how psychosis can affect the most fundamental human attributes of language, thought, perception, affect, sense of self and identity (Keks & D'Souza, 2003) and how today psychotic illnesses are perhaps the major mental health problem facing society (Barrowclough & Tarrier, 1997).

4.2 Continuum of experiences

The British Psychological Society (2000) estimated that around 10-15% of the general population experience what could be described as psychotic phenomena (i.e. hearing voices or hallucinations). Most were neither distressed, nor seeking help. Research shows that such people in the general population will not have received a diagnosis or needed treatment for such experiences (van Os, Hanssen, Bijl, et al, 2000); (Johns, Cannon, Singleton, et al, 2004). There is also growing evidence that some people can have psychotic experiences following extremely stressful or traumatic life experiences such as solitary confinement, social isolation, sleep deprivation, abuse and assault.

4.3 Prevelance and incidence rates of psychosis

Psychosis is most likely to occur in young adults (under 25 years). Around 3 out of every 100 people will experience a psychotic episode, making psychosis about as common as insulin dependent diabetes. Most people will make a full recovery from the experience. However, a proportion of these people will go on to develop more severe forms of mental health problems that can be extremely distressing and disabling.

Studies of prevalence and incidence rates have focused predominantly on single diagnostic categories, with schizophrenia acquiring the most attention. A recent review concluded that the lifetime prevalence of schizophrenia is around 5.5 per 1000, but noted that there were significant variations between regions (Goldner, Hsu, Waraich, et al, 2002). Of the studies that were included in the review, UK rates of schizophrenia varied between 4.8 per 100,000 (Brewin, Cantwell, Dalkin, et al, 1997) to 22.6 per 100,000 (King, Coker, Leavey, et al, 1994). Goldner and colleagues (Goldner, Hsu, Waraich, et al, 2002), suggest that the different rates reported by studies reflects variation across geographical regions, although they acknowledged that this could also reflect discrepancies seen in diagnostic practices.

4.4 Costs associated with psychosis

4.4.1 The specific cost of life-long psychoses

Whilst for many who experience psychosis, it is a one-off event or episode from which they make a full recovery (Early Psychosis Prevention and Intervention Centre (EPPIC), 2005), for others the effects can be life-long with varying severity (Bentall, 2004). These conditions pose enormous burdens in the UK, both in economic cost and human suffering out of proportion to raw prevalence statistics. This is also amplified because these disorders usually emerge in young people with their whole life ahead of them.

- *Much of what is spent goes on hospitalisation and day care. For example in 1994 (Davies & Drummond 1994) it was estimated that 97% of the total lifetime treatment costs provided for 41% of patients requiring hospitalisation for more than 2.5 years. At that time 5.37% of ALL NHS expenditure on in-patient beds was accounted for by patients with schizophrenia, exceeded only by those with learning disability and stroke. While this proportion will have fallen over recent years, it remains the case that the bulk of the cost of treating psychosis is due to hospitalisation and day care.*

Social exclusion and family burden add to this impact; indeed the WHO has calculated that at a family level, the burden and human suffering caused by psychosis is exceeded only by quadriplegia and dementia (WHO 2002). When added to the indirect costs the true burden becomes apparent. In 1992/3 direct health costs for supporting people with schizophrenia in England amounted to £714 million (Knapp, 1999). However when the indirect costs were included the overall cost rose to four times that figure (a conservative estimate of £2.6 billion, even without including caregiver costs.)

4.4.2 Social inequality 'cost' for adults with psychoses

- *In the UK only 12% of people with psychoses living in the community are employed (compared with 35% of disabled people generally), and are then often underemployed in poorly paid and less secure jobs.*

- *In Nithsdale (McCreadie 1992) a survey of activities in the previous two weeks of day-patients and out-patients revealed 39% either had no friends or had met none; 34% had not gone out socially; and 50% had spent no time on any interest or hobby other than watching TV.*

- *As housing tenants, one in four have serious rent arrears with consequent risk of losing their homes*

- *Are twice as likely to lose their job as the general population*

- *Are three times more likely to be in debt than the general population*

- *Have three times the risk of becoming divorced as the general population*

4.4.3 Health inequality 'cost' for adults with psychosis

- *Have three times the risk of dying each year compared to the general population (Brown & Barraclough 2000)*

- *Suicide is the single largest cause of premature death.*

- *10% will kill themselves:*

- -

  - *Two thirds of those deaths occur within the first 5 years (Wiersma, nienhuis, Sloof & Giel 1998)*

  - *Risk for suicide is greatest around the time of first diagnosis:*

- -

   a. *Young females have a 150 times higher risk...*

   b. *...and young males a 300-fold higher risk for suicide than the general population (Mortensen, 1995).*

   c. *Less likely during the acute episode itself, but often some months later when the young person may have disengaged from services*

- -

- *Social isolation, unemployment, and depression are among the recognised suicide risk factors.*

- *If one eliminates the effect of suicide and looks at only natural causes then the risk of dying each year is comparable with that of chronic physical diseases such as diabetes (Brown & Barraclough, 2000).*

- *People with psychosis are over twice as likely to smoke as the general population (Petit-Zeman, Sandamas, Hogman 2002)*

- *Are at substantially higher risk of developing diabetes than the general population (Peet 2004)*

- *Are twice as likely to die from heart or lung disease than the general population (Rethink 2002)*

4.4.4 'Cost' to families of caring for those with psychosis (Rethink 2003):

- *95% of carers are members of service users' families*

- *29% provide support and care in excess of 50 hrs per week*

- *90% of carers are adversely affected by the caring role in terms of leisure activities, career progress , financial circumstances and family relationships*

- *60% of carers have a significantly or moderately impacted reduced social life*

- *33% of carers family relationships are seriously affected*

- *41% of carers mental and physical health has been significantly or moderately reduced.*

4.5 Rationale for early detection and prevention

Over the last ten years, there is growing evidence to suggest that the early recognition and treatment of psychotic disorders can lead to significant improvements in recovery and overall outcomes. Studies suggest that the longer a psychotic episode is left untreated, the worse the outcome / prognosis for that individual (Crow, MacMillan, Johnson, et al, 1986); (Loebel, Lieberman, Alvir, et al, 1992; Marshall, Lewis, Lockwood, et al, 2005). Research also highlights that psychotic disorders rarely occur suddenly and that psychotic episodes are generally preceded by a gradual change in the person's well being and psychosocial functioning, often over a period of time. This period, which precedes the onset of full-blown psychotic symptoms, has been labelled the 'prodromal' phase.

These findings have led researchers to investigate the possibility of identifying and assisting young people who appear to be at increased risk, and / or those with very early symptoms, of a psychotic disorder. The idea is that by detecting and helping people deemed to be at high risk of a psychotic episode, it may be possible to prevent psychosis from occurring, or at least reduce the impact it may have on the individual's life by reducing the duration of untreated psychosis, where relevant. Hence, the potential benefits include the prevention or minimisation of psychosocial (Johnstone, Crow, Frith, et al, 1986); (Loebel, Lieberman, Alvir, et al, 1992) and possibly biological disruption (Wyatt, 1991). Furthermore, there is now emerging evidence from several studies that risk indicators can predict psychotic episodes (Morrison et al, 2002; Yung et al 1996, 1998; Falloon et al, 1998 (Riecher-Rossler, Gschwandtner, Aston, et al, 2007) and whilst some studies have shown a reduction in transition rates (Yung, Yuen, Berger, et al, 2007) there is still an overall trend towards transition rates of 30-35% (Cannon, Cornblatt & McGorry, 2007)

In relation to the treatment of psychosis, the concept of a 'critical period' (Birchwood, Todd & Jackson, 1998) has had a significant impact on UK service provision for people diagnosed with a psychotic disorder (Department of Health, 2001; Department of Health, 2003). The critical period relates to the first few years following the onset of first episode of psychosis which represents a critical stage where all types of treatment interventions should be maximised and given at the earliest opportunity to improve prognosis. For example, the NICE guidelines for schizophrenia (2002) highlight the necessity of getting help early via rapid identification, early referral and good liaison with secondary services.

Section 5:
5.0 Specialist service model

5.1 Background research

Research focussing on the prevention of psychosis began in Melbourne, (Australia), with the work of Yung, McGorry and colleagues. They established the Personal Assessment and Crisis Evaluation (PACE) clinic aimed at monitoring and providing care for young, help-seeking people identified as having an "At Risk Mental State" or being at high risk for impending psychosis (Yung, McGorry, McFarlane, et al, 1996; Yung, Phillips, McGorry, et al, 1998). To do this, Yung and colleagues set out to define an operational set of clinical features that preceded the onset of a first psychotic episode or 'high risk' or 'At Risk Mental State' (ARMS) criteria that could be used to identify individuals at increased risk of developing psychosis. These high-risk of psychosis criteria have since been adopted by a number of research groups around the globe.

These clinical features comprised a combination of state and trait factors. The state factors fell into two groups. The first is the 'attenuated symptom' group who experience low-grade positive psychotic symptoms, for example, hallucinatory experiences assessed at either the upper extremes of normal limits or unusual thoughts such as ideas of reference or persecutory ideas that are easily dismissed and do not affect behaviour to a significant extent. The second of these state groups is the "brief limited intermittent psychotic symptoms" (BLIPS) group who develop brief bursts of frank psychotic symptoms lasting less than a week and spontaneously resolving. The trait-based criteria included a combination of trait factors of psychosis (family history of psychotic disorder or the individual meeting criteria for schizotypal personality disorder), in addition to a change in mental state lasting at least one month and having a clear association with recent functional deterioration (Phillips, Yung & McGorry, 2000). For all these conditions, the term "at risk mental state" was preferred to the more usual term 'prodromal' on the basis that only a proportion would go on to develop psychosis. The idea of a prodrome is a retrospective concept which is not suitable for allocating individuals before a full expression of psychosis.

Using these state and trait risk factors, Yung and McGorry (Yung, McGorry, McFarlane, et al, 1996) identified a group of help-seeking people of which 33% became psychotic over 24 months (Phillips, Yung & McGorry, 2000). Following the pilot study, the PACE referral criteria were modified in an effort to increase specificity of detection, resulting in 41% of participants becoming psychotic over 12 months, with a small number of additional transitions over an 'extended period' (Yung, Phillips, Yuen, et al, 2003b). The peak time of risk for developing psychosis was within 4.5 months of entry into the study. Thus, it appeared possible to detect individuals who are at risk of developing psychosis at rates one thousand fold higher than in the general population. More recent studies have confirmed this, although transition rates are not quite so high: a later study completed at the PACE clinic reported that 28% of their sample had made transition by the 6 month assessment period, rising to 35% by the 12 month period (Yung, Phillips, Yuen, et al, 2004). Other studies have found that high rates of transitions can be evident in the first 12 months (Riecher-Rossler, Gschwandtner, Aston, et al, 2007).

Since this initial study, a number of research groups around the world have used the high risk criteria established by Yung and colleagues (Yung, McGorry, McFarlane, et al, 1996) in studies aimed at detecting and providing varying interventions to young people at increased risk of psychosis. Latest research suggests that if individuals meet ARMS criteria, then they will have a 30- 40 % chance of developing psychosis. This means that between 60 –70 % of people identified to be at increased risk of developing psychosis will never make the transition to psychosis.

These people have been referred to as false positives. Clearly, the detection of false positives is a serious consideration and studies attempting therapeutic interventions run the risk of including a majority of people who will never receive a diagnosis of psychosis. However, as will be discussed later, regardless of whether they will convert to psychosis, most referrals to the service have significant problems and are significantly disabled by their difficulties. What seems to be a problem is that their symptom profile does not necessarily fit into a clearly defined diagnosis and therefore service response can be patchy.

5.2 Assessment tools in early detection

Yung and colleagues original 'at-risk' / 'ARMS' criteria have been operationalised in clinical studies using a number of existing assessment tools, including the Positive and Negative Syndrome Scale (PANSS; (Kay & Opler, 1987) and the Brief Psychiatric Rating Scale (BPRS; (Overall & Gorham, 1962). However, these assessment tools have been developed for a population with psychosis and therefore have been criticised for lacking sensitivity in detecting or measuring at-risk or developing psychotic symptoms. Additionally, there are questions in both the PANSS and the BPRS relating to insight, which can be problematic and inappropriate for this client group.

More recently, other assessment tools specifically designed to assess the 'ARMS' group of people have been developed. These include the Comprehensive Assessment of At Risk Mental States (CAARMS; (Yung, Phillips, McGorry, et al, 2001) and the Structured Interview for Prodromal Symptoms and Scale of Prodromal Symptoms (SIPS/SOPS; (Miller, McGlashan, Wood, et al, 1999); (McGlashen, Miller, Woods, et al, 2001b).

The CAARMS has shown to possess good validity (measures what it purports to measure) as well as excellent inter-rater reliability (this means that the measure is consistent) (Yung, A., et al., 2005). Using this measure they identified a group of individuals who met the at-risk for psychosis criteria, 12% of whom went on to develop psychosis within a 6 month period. When this group was compared to those individuals who were assessed but did not meet the at-risk criteria, they had a significantly increased risk of developing psychosis with a relative risk of 12.44. This means that those who met the ARMS criteria were 12 times as likely to go on to develop psychosis when compared to those who did not meet the criteria on assessment.

The SIPS/SOPS has yielded acceptable inter-rater reliability (Miller et al., 2002) and showed that 53% of a group identified as being at-risk using this measure went on to develop psychosis within 12 months (Miller et al., 2002).

5.3 Treatment options

A number of interventions have been offered to those meeting criteria of at-risk mental states. In the first study completed by Yung and colleagues (Yung, McGorry, McFarlane, et al, 1996) they adopted a 'wait and see' approach. In a subsequent study conducted at the PACE clinic, Yung and colleagues offered a combination of supportive counselling, case management and symptom-based treatment such as medication for anxiety and depression (Yung, Phillips, McGorry, et al, 1998). On the basis of these studies, they concluded that psychological interventions on their own might not be that potent in terms of reducing transition to psychosis.

This led them to use specific interventions as part of the first randomised controlled treatment trial for people meeting ARMS criteria to be published (McGorry, Yung, Phillips, et al, 2002) testing the impact of a specific intervention on transition rates of psychosis. Fifty-nine help-seeking individuals aged 16-35 meeting criteria for ARMS were randomly assigned to receive experimental or control treatments. The treatment consisted of medication (low-dose risperidone) combined with cognitive-behavioural therapy, based on their known efficacy with psychotic symptoms. Both experimental and control groups also received a needs based intervention (NBI), which include case management, education and supportive psychotherapy targeted at the presenting symptom. The treatment phase lasted for 6 months at the end of which there was a significant difference in rates of transition to psychosis found between the specific intervention group and the NBI alone group.

This significant difference was lost after a further 6 months follow-up, leading the authors to conclude that it is possible to delay, rather than prevent, the onset of psychosis.

The PRIME study in New Haven used similar at risk criteria and opted to use an atypical antipsychotic medication (olanzapine at 5–15 mg/day) as the only intervention to attempt to prevent the onset of psychosis (McGlashan, Zipursky, Perkins, et al, 2003b). This study was a double-blind randomised placebo-controlled trial. The intervention period lasted for 1 year, with individuals assessed for a further year without medication. This was a multi-site trial and randomised 60 people (olanzapine N=31, placebo N=29). Transition to psychosis was assessed using the Scale of Prodromal Symptoms scores (SIPS/SOPS, described above). During the treatment year, there was no significant difference in transition rates to psychosis between the olanzapine group and the placebo group (16.1% in the olanzapine group versus 37.9% in the placebo group). Again in the follow-up year, the rate of transition to psychosis did not differ significantly between the two groups. However, individuals in the olanzapine group gained significantly more weight (mean= 8.79 kg / 19.38 lb versus mean= 0.30 kg / 0.66lb). They concluded that the difference between the olanzapine and placebo groups was suggestive of an advantage to the at-risk group taking the drug treatment, although it was not statistically significant (McGlashan, Zipursky, Perkins, et al, 2003a).

It is important to highlight that the use of antipsychotic medication to treat people satisfying criteria for at-risk mental states has provoked much controversy on ethical grounds. It has been argued that, given the accuracy levels of the current assessments and the ethical implications of treating a large number of false positives, the side effects of such medications are significant enough to consider alternatives (Bentall & Morrison, 2002). These side effects, which commonly include weight gain and sexual dysfunction and in extreme cases, death, can add to an individual's distress level, which we know to be already high (French & Morrison, 2004). Additionally, when we consider the age group that the at-risk population falls into, we have to consider the implications of significant weight gain and sexual dysfunction on self-esteem, and the effect that antipsychotic medication may have on the developing brain.

A third clinical trial, the EDIE (Early Detection and Intervention Evaluation) trial in Manchester (UK) randomised 60 participants meeting ARMS criteria to a monitoring alone condition or to monitoring plus cognitive therapy (CT). The PANSS assessment tool (Kay et al., 1987) was used to assess whether people were at increased risk of psychosis in addition to distress levels, measured using the General Health Questionnaire (GHQ; (Goldberg & Hillier, 1979) and/or recent deterioration in function as assessed using the Global Assessment of Functioning (GAF; (American Psychiatric Association, 1994). CT was regarded as an acceptable and plausible treatment for a number of reasons.

CT works with thoughts, beliefs and processes such as metacognitions which research shows to be different in those who meet ARMS criteria (Morrison, Bentall, French, et al, 2002). Birchwood and colleagues (Birchwood, Smith, Macmillan, et al, 1989) showed that cognitive-behavioural monitoring of 'prodromal' signs in clients with an existing diagnosis of psychosis was beneficial for relapse prevention or minimising a relapse if one did occur, and it has since been shown to significantly reduce relapse rates and hospital admissions in people who are at high risk of relapse (Gumley, O'Grady, McNay, et al, 2003). Additionally, CT has been used in a number of studies (including randomised controlled trials) involving individuals with acute and chronic psychotic symptoms, and has been shown to be effective (Drury, Birchwood, Cochrane, et al, 1996); (Kuipers, Garety, Fowler, et al, 1997a); (Sensky, Turkington, Kingdon, et al, 2000); (Tarrier, Yusupoff, Kinner, et al, 1998). Furthermore, most of the at-risk mental state population show significant affective symptoms (emotional symptoms), for which there is evidence that CBT is an effective treatment, in both anxiety disorders (e.g. (Clark, Salkovskis, Hackmann, et al, 1999)) and depression (e.g. (Hollon, DeRubeis & Evans, 1996). The importance that CT places on developing shared problem lists and goals may also mean that it is a useful intervention for the false positive group, who are seeking help for distressing symptoms but will not go onto develop psychosis.

Even CT however raises ethical issues, which should be considered. The false positive group may be stigmatised through this experience, therefore consideration should be given to the use of less pathologising language when dealing with clients. For example, labels such as 'prodromal', 'pre-psychotic' or 'pre-schizophrenic' could be replaced with 'distressed', 'help-seeking' and 'at risk of developing psychosis' (French & Morrison, 2004). The EDIE clinical trial found that the overall transition rates to psychosis as measured by the PANSS assessment tool were 17% at one year. EDIE also found those individuals that received CT were significantly less likely to make the transition to psychosis in comparison with the group that received monitoring alone (Morrison, French, Walford, et al, 2004b) Figure 1. The EDIE trial has since led to the delivery of local services in Salford (Manchester, UK) under the name of the EDIT service. The data so far suggests that a psychological intervention for ARMS is important (Hafner & Maurer, 2006) and this is backed up by guidance from the International Early Psychosis Association (IEPA ("International clinical practice guidelines for early psychosis," 2005) "Some patients could be treated with psychological therapy alone as a first-line strategy" (p.926).

PANNS P-scores	Prescription of antipsychotics	DSM-IV Diagnosis
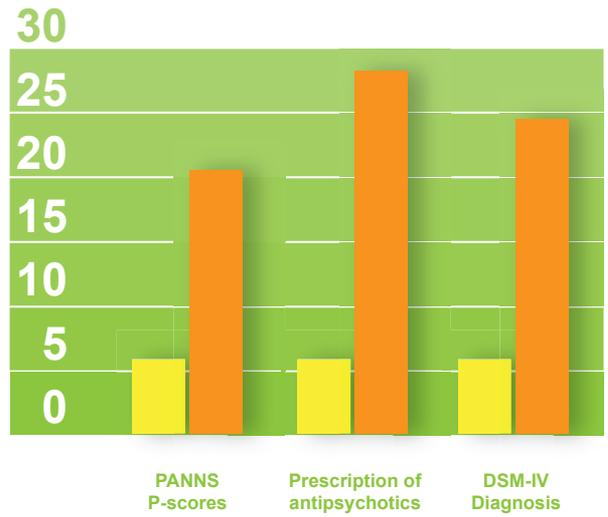
5.4   Service user preference

When considering service-user preferences in relation to treatment options it can be useful to examine the drop out rates across the trials which have already been conducted. Figure 2. shows the comparison of drop out rates across each of the trials outlined previously. This demonstrates that the acceptability of the EDIE trial, using cognitive therapy for at-risk, far exceeded that of either of the studies which have included a pharmacological treatment (medication), either as a stand alone or accompanying intervention.

Number of drop outs (%)
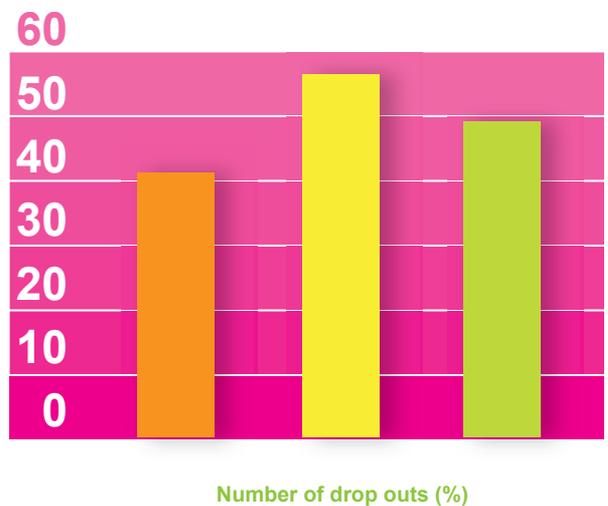
- PACE (CBT plus risperidone)
- EDIE (CT for at-risk)
- PRIME (Olanzapine)

Figure 2. A comparison of the drop out rates across treatment trials for individuals at-risk of psychosis.

5.5 Level of distress, help seeking and axis i disorders

It is important to stress that the individuals included in these trials were experiencing significant levels of distress and disability, and were help seeking. It has been well documented by researchers such as van Os and others, that many people in the community have isolated psychotic experiences and are not distressed by such experiences (van Os, Hanssen, Bijl, et al, 2000); (Johns, Cannon, Singleton, et al, 2004). On entry into the PACE clinic, participants had a mean Global Assessment of Functioning (GAF) score of 61, which equates to moderate levels of difficulty in social/ role functioning (Yung, Phillips, Yuen, et al, 2004). In the EDIE trial functioning was even lower with mean GAF scores at 49, and 85% of participants reaching 'caseness' levels on the GHQ (Morrison, French, Walford, et al, 2004b). MacGlashan et al. (McGlashan, Zipursky, Perkins, et al, 2003b) in the PRIME study found individuals to have a mean score of 42 on the GAF, which equates as a substantial level of functional disability. Importantly, there was a mean drop of 15 points on the GAF over the year prior to coming into contact with the study.

Additional to the presence of at-risk symptoms, levels of distress and individual's asking for help, a significant proportion of participants in the trials discussed here met criteria for a number of non-psychotic emotional diagnoses (Axis I disorders). This alone qualifies them for receiving an intervention of some kind. In Yung et al.'s (1996) pilot study their sample included 86% of participants with symptoms of anxiety, 76% with depressed mood, 62% with low energy and 71% with social withdrawal. In the prediction study carried out by McGorry et al. (McGorry, Yung, Phillips, et al, 2002), out of those who did not make transition at 12 month follow-up, 45% met criteria for mood and/or anxiety diagnoses (McGorry, Yung, Phillips, et al, 2002).

> ### Service-user feedback: psychological symptoms
>
> **"Before I was included in the EDIE research project, I'd experienced an increasingly difficult variety of distressing psychological experiences. These included depression (from quite a young age), stress (more recent), and social and general anxiety (most recent)."**

5.6 Predictors of transition to psychosis

As previously described, the PACE clinic reported that 28% of their sample made transition by the 6 month assessment period, rising to 35% by the 12 month period (Yung, Phillips, Yuen, et al, 2004). On analysis of data from the beginning of the study, they found significantly lower (more impaired) GAF scores in those who subsequently made transition to psychosis (Yung, Phillips, Yuen, et al, 2004). They also found that when comparing the length of time between the onset of 'symptoms', and time to first contact with appropriate services, those that developed psychosis had experienced significantly longer delays. Additionally, those that made transition to psychosis had significantly higher levels of depression, measured with the Hamilton Rating Scale for Depression (HRSD; (Hamilton, 1960) (Yung, Phillips, Yuen, et al, 2004). There were no significant differences between the groups on measures of anxiety, mania symptoms and levels of negative symptoms (Yung, Phillips, Yuen, et al, 2004).

In terms of significant predictors of transition to psychosis, the EDIE trial found that those participants in the monitoring alone group (in comparison to the CT group) and those with high PANSS positive scores at the beginning of the study, were more likely to make the transition to psychosis (Morrison, French, Walford, et al, 2004b).

5.7 Education & awareness raising

Early detection of help seeking individuals at risk of developing psychosis is the first step in working towards preventing psychosis. However, the 'at risk' mental state is a relatively new concept which healthcare providers, educational organisations, and the general public may have little awareness of.

For example, a young person at risk of developing psychosis may experience psychological symptoms, distress and disability and subsequently seek help from their GP. However, the young person's 'at risk mental state' may go unrecognised and inappropriately treated. This may happen for a number of reasons:

- *Healthcare providers and other workers in contact with young people may have little knowledge of the "ARMS" and therefore are unlikely to recognise symptoms that are risk markers for psychosis.*

- *The stigma associated with psychosis may prevent a person disclosing the full extent of their difficulties for fears of going mad or being carted off in a white coat and locked away in a psychiatric hospital.*

- *Healthcare providers, in particular GPs, may have potential psychosis at the back of their mind in response to an individual' presentation but may be unsure of how best to deal with this (i.e. watch and wait for definite signs/ crisis/ emergency) or they may have fears or concerns about how to raise and discuss the possibility of psychosis.*

- *GP's may also be approached by concerned family members/carers on behalf of a young person experiencing difficulties that may indicate psychosis and the GP may not sure how to best to respond or what to suggest in the absence the young person*

- *Health providers may have the tendency to attribute/ dismiss the young person's at risk mental state to be related to the 'storm and stress' of normal adolescence.*

- *GPs may make referrals to specialist services only to be told the individual's symptoms have not reached the service's threshold criteria*

As described above, this can result in such individuals making numerous help seeking contacts with different health providers (e.g. GP, Primary Care mental health services, secondary mental health services, A & E) but not actually receiving appropriate help for their difficulties, resulting in being passed from one service to the next. This is in line with research that shows that individuals can make on average 8 help seeking contacts before they access appropriate help (Johnstone, 1992), with its associated consequences (see above).

Therefore, to increase the chances of identifying help seeking people at risk of developing psychosis, there is an important need to increase awareness of the risk markers for psychosis (i.e. the ARMS) and promote early detection and intervention work in the community. This requires an active outreach approach to educate potential referral sources – including healthcare oriented services and other non-health related organisations in the community in contact with young people i.e. schools, colleges, Connexions, Youth Offending teams, housing and voluntary sector organisations.

GP comment

"Sometimes they have to be standing on a bridge before we can get people help and we have to exaggerate symptoms to get the psychiatrist's attention at an earlier stage"

Ref Patients' and health professionals' views on primary care for people with serious mental illness: focus group study.

Lester, H., Tritter,Q., Sorohan,H., Brit Medical Journal 2005;330;1122

Service-User Feedback: Pathways To Care

"My first point of contact for seeking help was with my GP. I attended an appointment, and disclosed to my GP an increasing and worrying level of depression and stress, though I didn't disclose anything of the unusual thoughts, or my fear of emerging insanity. I was prescribed a short, initial course of anti-depressant medication. I requested an appointment with the practice counsellor, because I was aware that often a talking form of therapy can be very beneficial, and also because I felt one of the most important ways I could relieve my stress was to disclose my fears to someone. However, when I met the practice counsellor, I simply didn't enjoy the experience (on a subjective level, I didn't feel comfortable with the counsellor), and I didn't disclose anything more than I'd disclosed to my GP."

"I didn't arrange a second appointment. After some months I approached my GP again and asked if I could be referred ……. She informed me I'd be on a waiting-list for a considerable time to see a psychologist (around 12 months). I made it clear that I couldn't wait that long because my psychological problems seemed, to me, to be reaching some critical point, and I was afraid that without help, something catastrophic might happen to me."

In line with the work carried out by Yung and colleagues at the PACE Clinic in Melbourne, the following strategies have been used by EDIE 2 in an attempt to promote and increase awareness of early detection work and educate the local community:

- *Presentations for mental health professionals about the ultra-high risk inclusion criteria, how to identify and screen for risk indicators of psychosis, and the treatment options available i.e. EDIE 2*

- *Presentations and more in depth training sessions for non-mental health professionals about how to identify and screen for risk indicators of psychosis, the treatment options available.*

- *Distribution of awareness raising and educational material e.g. posters of EDIE 2, information leaflets for potential participants and referrers.*

- *Distribution of a quarterly newsletter to potential referral sources and those that have referred help-seeking individuals*

- *Web site access with information detailing inclusion criteria and treatment options*

- *Mental health promotional work in schools and other forums to reach out and educate young people.*

A set of guidelines have been established by EDIE 2 in relation to best practice for liaison. These recommend:

- *Less formal presentations in smaller groups*

- *Integrate case studies into presentations which are specific to the type of team/service you are liaising with*

- *Producing more in depth material about the trial and broader early detection issues and training for workshops*

- *Addressing concerns from referrers and networking.*

5.8 Referrals to projects and services

The majority of individuals who took part in these and earlier studies of people with first episode psychosis had multiple helper contacts before they reached appropriate services. In the Northwick Park first episode psychosis study (Johnstone, Crow, Frith, et al, 1986), clients trying to access help had an average of eight help-seeking contacts prior to gaining appropriate treatment. This 'revolving door scenario' only serves to contribute to an individual's distress and, in the UK, frequently ends with contact with the police and compulsory admission to hospital, with evidence to suggest that the trauma associated with such hospital admissions can lead to the development of post-traumatic stress disorder (Frame & Morrison, 2001); (McGorry, Chanen, McCarthy, et al, 1991).

5.9 The PACE Clinic

Phillips et al. (Phillips, Yung, Hearn, et al, 1999) evaluated the referrals to the PACE clinic received over a 20 month period. A sample of 45 people who met criteria and consented to taking part were included in the analysis. The average (mean) number of contacts with health or allied professionals was 2.3 (SD = 1.3, range = 1-7). It was noted that contacts with general health services or other professional services were early in their pathway to PACE, and individuals accessed mental health services later. It was also noted that the average length of time between the first symptom experienced, and the individual's initiation of help-seeking, was 86 weeks. The average length of time between the first contact in the pathway and referral to PACE was 41.4 weeks. Therefore, the average time from onset of symptoms to contact with PACE is approximately 2.5 years (127 weeks). It was hypothesised that a number of factors could be involved in decisions to wait, including; mild symptoms, ego-syntonic (fitting with ones own image of self) nature of symptoms, non-referral from other services, lack of knowledge about PACE, misinterpretation of symptoms, self-medication and fear of stigmatising/labelling (Phillips, Yung, Hearn, et al, 1999). This suggests that education should be an important part of the activities undertaken by any early detection and intervention service (see above).

At the PACE clinic in Melbourne, the majority of referrals come from a specialised early psychosis assessment team (Phillips, Yung, Hearn, et al, 1999) known as the Youth Access Team. This team has a variety of referral sources including generic health and mental health services, school and university counsellors, general practitioners, private psychologists/psychiatrists, family and adolescent health services. Additionally, PACE also receives referrals from these sources directly (Phillips, Yung, Hearn, et al, 1999). Referrals to the EDIE trial were from a variety of sources including secondary services, student health services, general practitioners, accident and emergency departments and community drug teams (Morrison, Bentall, French, et al, 2002). This indicates that early detection and intervention services should cast their nets as far and wide as possible to reach the at-risk group. In addition, there are many opportunities to provide training on at-risk mental states to those individuals who come into contact with young people. This could be done both for those who have professional and specialist mental health backgrounds, as well as those with little or no knowledge at all.

5.10 EDIT Salford

The EDIT service in Salford (Manchester, UK) has received 112 referrals in the last two years: 64 during year ending 31st March 2006, 48 during year ending 31st March 2007. Once referred, the average waiting time for an assessment was 16 days in year ending 31st March 2006 and 20 days in year ending 31st March 2007. Due to the specialist liaison and training activities, which have been carried out over the years in this region from members of this team, the referral sources are wide and varied. A breakdown of the referral sources for the 112 referrals is shown in table 1.

Referral source	Number referred
Community Mental Health Teams	26
Youth Offending Team	19
Primary Care Psychology Services	17
General Practitioner (GP)	7
Early Intervention Team	7
Inpatient Unit	7
Housing Agencies	6
Connexions	5
Crisis Team	4
Drugs Services	4
Self Referral	2
Family	2
CAMHS	2
Assertive Outreach	1
Leaving Care project	1
Not recorded	2
Total number of referrals	**112**

Table 1. Referral sources to Salford EDIT (UK) from 1st April 2005 – 31st March 2007

5.11 OASIS (Outreach And Support in South London)
Lucia Valmaggia & Philip McGuire on behalf of the OASIS Team

The OASIS (Outreach And Support In South London) service offers assessment and treatment for people between 14-35 years who have a high risk of developing psychosis, but who are not yet psychotic (Broome et al 2005). Early warning signs are similar to the symptoms of psychosis but are less severe and/or less frequent. Thus, a person may have unusual thoughts or beliefs, but sometimes doubts them and is not overly preoccupied by them. Or a person may see or hear things, but does not believe that these perceptions are real. As with psychosis, the person's thinking may be confused, they may withdraw from friends and family, and they often feel anxious, irritable or depressed. Without treatment, about a third of people with these early signs and symptoms will develop a first episode of psychosis within 12 months (Yung et al., 2003).

OASIS aims to prevent or delay the development of psychosis, and provide immediate access to specialized first episode services if psychosis does develop. OASIS only sees people who are help-seeking, and takes referrals from GPs, colleges, counsellors, individuals themselves and family members.

5.11.1 How OASIS works

Clients are seen in a non-psychiatric community setting to maximise accessibility and minimise stigmatisation. Most are seen in the client's GP surgery, which is convenient for the client and allows the team to provide face to face feedback to the GP (who is often the referrer). Local GPs like this arrangement and have welcomed the quick response to referrals. Clients can also be seen at home and in the OASIS team base, which is in a residential block of flats in Brixton, South London. Referrals to OASIS can be made by anyone, including clients and their relatives, via telephone, fax, letter or email.

The team has a public access website (www.oasislondon.com) which provides information about prodromal symptoms and how to contact the service. Leaflets carrying the same information are available in GP waiting rooms and other mental health facilities and a regular newsletter is circulated to local GPs. Referrals are responded to within 7 days. The first step is to carry out a comprehensive mental health assessment. Clients with prodromal symptoms are offered treatment by OASIS, while people with other mental health problems (such as depression or an already established psychotic illness) are directly referred to the appropriate mental health team. Almost all the clients initially assessed by OASIS have a mental health disorder. Thus, even those who do not have prodromal symptoms and have other mental health problems are diagnosed earlier than would have occurred otherwise, providing them with faster access to treatment.

5.11.2 OASIS clients

Over the past four and half years, OASIS has received 536 referrals from GPs, college counsellors, families and patients, and other mental health teams. The average age is 23 years, 60% are males and about two-thirds are from ethnic minority groups. Most are either employed or in higher education, although often finding it difficult to work normally.

A total of 100 individuals were screened-out either because they were living outside the boroughs served by the Trust or because they were found to be unsuitable after discussion with the referrer, or because they were outside the age range of the service. An assessment was offered to the remaining 436 suitable referrals. Seventy-four clients either refused an assessment or recurrently failed to meet with the team. Of those assessed by OASIS, 30% were already experiencing a psychotic episode and were referred on to the local first episode team. Another 25% were experiencing other non-psychotic mental health problems and 5% had no psychopathology. About 40% of the people assessed by OASIS meet criteria for an at risk mental state, the most common presenting symptoms are paranoid ideas that preoccupy and distress the client but which he/she is unsure whether to believe. Many clients with an at risk mental state also have additional mental health problems, such as anxiety, depressive symptoms, or personality problems.

5.11.3 What clients are offered

Clients who meet criteria for an at risk mental state are provided with information about their symptoms, practical and social support, and are offered psychological treatment (Cognitive Behaviour Therapy) and medication. Clients are seen regularly by the same clinician over 2 years, the period when the risk of psychosis is maximal. Clients are usually keen to have treatment and the engagement with the team is very good, with 85% still attending appointments after 6 months. Most clients receive psychological treatment (CBT), while a minority chooses to receive also medication (a low dose antipsychotic or an antidepressant).

5.11.4 Effectiveness of treatment

Treatment usually ameliorates the presenting prodromal symptoms and the associated distress and risk of self-harm. Most clients are able to continue work or education, or return to this if they have dropped out. In the longer term treatment significantly reduces the risk of the client developing a psychotic illness in the next 2 years to 23%. In the minority of clients who do become psychotic, the outcome appears to be better than in patients who were not seen prior to the onset of illness. Thus they are less likely to require hospital admission, compulsory treatment, or involvement of the Police, and more likely to adhere to subsequent treatment. This may reflect the marked reduction in the delay between the onset of psychosis and the initiation of its treatment. In the UK this is usually around 12 months, but, because the client has already been engaged, the delay in OASIS clients is about one week. OASIS clients who develop psychosis are immediately referred to the local team for first episode psychosis. OASIS has close links with the local first episode teams and there is usually a seamless transfer of care.

5.11.5 Delivering Racial Equality

In South London psychosis is 7 times more common among Afro-Caribbeans than Caucasians, and people from ethnic minorities who develop psychosis are more likely to be admitted to hospital and have treatment under the mental health act (Fearon et al 2006). OASIS has been particularly successful at engaging people from ethnic minorities, who comprise two-thirds of our clients. Most describe their first contact with services a positive one. Moreover, among those managed by OASIS, there are no significant differences between ethnic groups in the rates of psychosis, hospital admission and use of the Mental Health Act. Providing mental health services at an earlier phase of illness may thus reduce many of the disparities in the experiences of clients from ethnic minorities.

5.11.6 Liaison with primary care and with carers & service users

By providing an accessible service that operates in primary care, OASIS facilitates working relationships between mental health and other health professionals. The service was set up in collaboration with local GPs and its approach is popular with referrers, clients and their relatives. OASIS has an active service user representative group, and their positive views on their experience with OASIS have been described locally in Lambeth Life. Service users influence how the service operates by leading their own research on what their fellow clients want and need from the service, and the extent to which OASIS addresses these needs.

5.11.7 Cost effectiveness

Reducing the number of people who develop psychosis and improving outcome in those that do (with fewer hospital admissions and crises, greater employment and less reliance on benefits) has a substantial impact on the economic cost of care to the NHS and to society. Even a very conservative estimate suggests that these benefits are substantial, with a saving of £1,125 per client in the first 18 months compared to Care As Usual (Valmaggia et al, 2007).

5.12 Birmingham ED:IT

Birmingham ED:IT have been in place for a number of years and are a well established service for ARMS clients. This team have been involved with research projects such as the European Prediction of Schizophrenia (EPOS) and more latterly EDIE2.

The team has had nearly 300 hundred people referred since its inception in January 2002 with a mean age of 19.7 years at point of referral. This team have found that nearly 25% of their referrals already met criteria for FEP with 40% of referrals being suitable for their team. A large number of referrals (78.7%) experienced co-morbid affective symptoms and high levels of self harm (37.8%) and previous suicide attempts (26.6%). Data from ED:IT indicates that this is a very high-risk population with significant needs. Even if individuals do not go on to develop psychosis they are certainly experiencing emotional distress and require assistance.

5.13 International early psychosis association clinical guidelines

The International Early Psychosis Association (IEPA) advise considering the possibility of psychotic phenomena in young people who become less able to function or increasingly withdrawn, distressed or agitated without an ability to explain why (International, 2005). They suggest that people who are felt to be at risk of developing psychosis who are seeking help for subsequent distress or disability, should be engaged and assessed and, where relevant offered:

- *Regular monitoring*

- *Interventions aimed at specific difficulties such as anxiety, depression or substance misuse and help with interpersonal, vocational and family issues where relevant*

- *Psychoeducation and assistance to develop coping strategies for subthreshold psychotic symptoms*

- *Family support and education*

- *Clear information about risks in relation to future mental health issues, delivered in a careful and considered way.*

These guidelines should be delivered in low stigmatising environments such as home, primary care settings or youth-based services.

6

6.0 Summary

Operational criteria for detecting 'prodromal' or at risk mental states have been developed largely based on individuals seeking help for attenuated or brief, self-limiting symptoms which do not meet threshold criteria for psychotic disorder. These individuals present largely to primary care and other non-specialist mental health settings. Follow up studies have confirmed that 15-40% will make the transition to psychosis over the next year. Cognitive therapy alone and in combination with risperidone have shown to be effective strategies for reducing or delaying the transition to psychosis, as well as ameliorating the severity of the non-psychotic symptoms and distress. Antipsychotic medication alone has not provided significant results in achieving this aim. Further work is needed to clarify the relative merits of these interventions especially in the context of the ethical issues involved, like the work being done in the EDIE 2 trial. The IEPA have developed a set of clinical guidelines which are helpful in thinking about the key tasks of an early detection team. A central theme of working within these guidelines is to provide services in a non-stigmatising way. Other important aspects of working in the area of early detection and prevention of psychosis have been highlighted. These areas include liaising with and training a variety of professional and non-professional workers in key signs. Working with education settings can also be an important aspect of challenging stigma about mental health issues in general and more specifically around psychosis and at risk of psychosis.

Sophie Parker, Paul French, Aoiffe Kilcommons, David Shiers. 2007

7

7.0 Acknowledgements

8

8.0 Appendix

ARMS Service implementation guide

8.1 Who is the service for?

- *People aged between 14 and 35 identified as being at ultra-high risk for the development of psychosis*

- *People aged between 14 and 35 who are help-seeking and distressed by their experiences*

8.2 What is the service intended to achieve?

The word psychosis is used to describe conditions which affect the mind, where there has been some loss of contact with reality. Psychosis is most likely to occur in young adults and is quite common. Around 3 out of every 100 people will experience a psychotic episode, making psychosis more common than diabetes. Most people will make a full recovery from the experience. However, a proportion of these people will go on to develop more severe forms of mental health problems that can be extremely distressing and have significant personal, societal and financial costs. Without adequate care, psychosis can place a heavy burden on carers, family and society at large.

Studies have suggested that primary care staff and teachers can be trained to identify risk indicators that can be powerful predictors of later psychotic episode. The identification of such risk factors suggests the possibility of using psychological interventions to decrease the incidence of psychotic disorders. Research indicates that the average length of time between someone experiencing psychotic symptoms and receiving treatment, known as the duration of untreated psychosis (DUP), is one year. Evidence suggests that if people are left with psychotic symptoms for a lengthy period of time then this can significantly impact on future outcomes, and this has led to the national development of early intervention teams.

Individuals considered to be at ultra-high risk of psychosis are typically having 'unusual experiences' (e.g. paranoia, voice hearing) which they find distressing and confusing. Although the severity of these 'unusual experiences' is less than is seen in established psychosis, it can be very distressing and lead to young people disengaging from college, work and their social network. Furthermore, when a young person with a close family member with psychosis starts to experience emotional distress (e.g. anxiety/depression) they often fear they are 'going mad' which can be very frightening. Recent work has suggested that there are three criteria which suggest people to be at ultra-high risk of developing psychosis (40-50% becoming psychotic over one year) (Yung, Phillips, Yuen, et al, 2003a). These are:

- *Attenuated symptoms: changes in thoughts or emotions (e.g. hearing voices or seeing things); changes in perception of objects (e.g. things look or sound different); or misinterpretation of events (e.g. feeling slightly suspicious about others at times).*

- *People with a first-degree relative who has a psychotic disorder plus a recent deterioration in their ability to cope as may be seen through behavioural or emotional changes.*

- *Brief limited intermittent psychotic symptoms (BLIPS): Severe changes in thoughts or emotions (e.g. hearing voices or seeing things); severe changes in perception of objects (things look or sounding different) or strongly held unusual beliefs (feeling highly suspicious, persecuted or special). These unusual experiences are of the intensity seen in frank psychosis however they last for less than 1 week and resolve without medication.*

These criteria can be reliably assessed using semi-structured interviews such as the comprehensive assessment of at-risk mental states (CAARMS: (Yung, Yuen, McGorry, et al, 2005).

Individuals are help seeking, and are therefore exerting demands on the NHS without an evidence base to inform practice. Evidence from retrospective observations of first episode psychosis suggest that over 75% make contact with their GP on matters related to their developing psychosis (Cole, Leavey, King, et al, 1995), and that some 50% of these contacts occur during this crucial stage. However, the ambiguous nature of at risk signs leads to poor treatment response (Skeate, Jackson, Birchwood, et al, 2002).

An at-risk service aims to enhance patient experience and improve outcomes by:

- *Preventing transition to psychosis by providing evidence-based interventions*

- *Reducing distress and improving quality of life*

- *Reducing DUP should transition to psychosis occur*

- *Identifying untreated first episodes of psychosis*

- *Developing meaningful engagement and promoting recovery*

- *Providing user-focused services i.e. a seamless service available for those from age 14 to 35 that effectively integrates child, adolescent and adult mental health services and works in partnership with primary care, education, social services, youth and other services*

- *Managing the successful discharge by ensuring that care is transferred thoughtfully and effectively*

- *Raising awareness regarding early signs of psychosis in primary care, social care, voluntary sector and educational staff*

These aims are in accordance with national guidance (e.g. components for early intervention outlined in the Department of Health Policy Implementation Guide) and international targets (e.g. the World Health Organisation's Early Psychosis Declaration: EPD; (Bertolote & McGorry, 2005). The key objectives of the EPD are to raise community awareness, improve access via engagement and treatment, promote recovery and ordinary lives, engage and support families and to teach practitioners and community workers to recognise early psychosis. DH recognises the importance of this activity and due to the latest research findings they have added a new line (ref 5379) to the local delivery plan. The detailed guidance clearly emphasises this activity.

Evidence indicates that the following principles of care are important:

- *Culture, age and gender sensitive*

- *Service-user and family focused*

- *Meaningful and sustained engagement based on an assertive outreach model*

- *The use of low-stigmatising settings*

- *Age appropriate services tailored to the individual*

- *Employment of recovery based principles where people are encouraged to participate within 'normal' social roles and to fulfil their potential*

- *Interventions based on those problems identified by the service-user*

8.3   What does the service do?

By providing interventions at this crucial stage it is possible to get young people's lives back on track so they can pursue their goals and maintain those areas in which they have strengths (e.g. attend college, develop relationships etc.). Additionally, at-risk services can detect cases where first episode psychosis has been undetected and untreated and refer such people on to appropriate services (e.g. Early Intervention Services). It can also increase referral opportunities by thinking carefully about pathways to care in the local area. Referral pathways can also be enhanced by utilising the primary care checklist developed within an at-risk service and by offering an easy to access consultation process where informal case discussion is encouraged. For those service users who develop psychosis despite receiving a service from the early detection and intervention team, their DUP should be less than 3 months, since this is the maximum interval at which monitoring occurs (and this is the national standard set by DH for DUP).

The improved ability to accurately define high risk of psychosis (Yung, Phillips, McGorry, et al, 1998) has led researchers to explore appropriate interventions for this group of individuals. Interventions need to be carefully considered in the context of the ethical issues involved. There are risks associated with using pharmacological interventions (particularly with false positive cases), adherence to antipsychotic medication within this group is variable (McGorry, Yung, Phillips, et al, 2002), and the ethical merits of this approach are difficult to judge (Cornblatt, Lencz & Kane, 2001) provoking some debate (Bentall & Morrison, 2002). Additionally, antipsychotic medication alone has not provided significant results in preventing or delaying transition to psychosis. The use of psychological interventions is not only an acceptable intervention but has a proven evidence base for preventing or delaying transition to psychosis (Morrison, French, Walford, et al, 2004a).

Cognitive therapy (CT) is well-suited to the prevention of psychosis for several reasons, including the known efficacy of CT for psychosis relapse prevention (Gumley, O'Grady, McNay, et al, 2003), its demonstrated effect on acute and chronic psychotic symptoms (Kuipers, Garety, Fowler, et al, 1997b; Sensky, Turkington, Kingdon, et al, 2000; Tarrier, Yusupoff, Kinner, et al, 1998) and its proven effectiveness with depression and anxiety (Clark, 1999) (which are commonly observed before the onset of psychosis). The ethics of using CT with this client population may, therefore, be less controversial, especially as our patients are help-seeking and therefore likely to benefit from CT even if falsely assumed to be at risk of psychosis (In the study by McGorry and colleagues, 40% of those who did not make a transition to psychosis nonetheless met the criteria for an axis I disorder such as anxiety or depression). The suitability of CT for help-seeking high-risk patients is borne out by consent and withdrawal rates in our study, where 94% of those eligible consented to randomisation, with 6% withdrawals during the follow-up phase.

It is clearly possible that stigmatisation, fear of developing psychosis and self-imposed restrictions on activity (for fear of provoking illness) may be unintended consequences of delivering CT to people at high-risk of psychosis. However, the collaborative, problem-orientated structure of CT means that it is able to identify and target any adverse developments within the therapy process itself (for example, by helping patients set realistic and achievable goals in many different areas of life and by encouraging patients to test out their catastrophic fears about the consequences of activity by means of behavioural experiments). The normalising rationale of CT also addresses stigmatisation, by suggesting that unusual experiences are often the understandable product of life experiences, belief systems and information processing strategies, rather than the result of a degenerative brain disease.

Table 1a Key Activities

Key components	Key elements	Comments
General		
Raising awareness of psychosis and early warning signs indicative of an 'at risk mental state'	• Active participation in community-based programmes to reduce stigma associated with mental health issues and psychosis, including those at high risk of developing psychosis • Educational programmes for primary care, education institutions, social services and other relevant agencies i.e. connexions staff, youth offending teams	• See service specification for Mental Health Promotion Framework (section 7 of the policy implementation guide) for information on effective programmes • Awareness programme needs to emphasise the rationale for at-risk services and the ambiguity of signs which may indicate an 'at risk mental state'
Focus on client identified problems and signs common to an 'at risk mental state'	• Professionals need to understand the various risk factors which may lead to the development of 'at risk mental states' as well as an awareness of 'normal' changes which may occur during adolescence / early adulthood • Referrers should be aware of those signs which may indicate an 'at risk mental state' and refer in accordance with their concerns for the young person rather than them having knowledge that the young person is definitely at risk of developing psychosis • Those problems identified by the young person as being the most distressing should be targeted first in therapy while also focusing on other key engagement factors	• Training / reading should be around relevant material specific to those considered to be at ultra-high risk of developing psychosis as well as common psychological processes / difficulties as these models would suggest, while bearing in mind additional factors which may be more idiosyncratic to a service-user
Age, culture and gender sensitive service	• Services should effectively engage services for young people in the local area and need to be recovery focused • Access to translation services should be made available and thought given to how the service can be made available to those whose first language is not English • Gender sensitive services should be provided (See section 8 for guidance on developing culturally competent services)	• Services should reflect the fact that around two thirds of the young people presenting for help will be in adolescence or early adulthood • Services need to comply with the Children Act for those service users who are 14 to 18 years old
Assessment		
Early detection	• Education and training should be provided to GPs, primary care clinicians and other key agencies including connexions staff, youth offending teams and education staff about potential signs of an 'at risk mental state' and how to refer those people who fit these criteria • Routine audit of effectiveness of referral pathways and training packages offered	• Use of the Primary Care checklist and other tools should be used in training clinicians in recognising those who may be a ultra-high risk of developing psychosis • Pathways of care should be explicit and understood by all parties • Access to assessment should be easy and rapid
Assessment	• Service user centred assessment with an identified key individual taking a lead • Allowing enough time to develop trust while ensuring that an early assessment is completed as soon as possible	• Assessment should use the CAARMS for inclusion to the service • Comprehensive assessment should also include: • Clinical history • Risk – including suicidal risk • Social / occupational functioning • Assessment of family or other support • Service-user's goals and understanding of their experiences
Care plan	• Initial care plan produced within a week of assessment • Initial care plan reviewed at three months • Use of care plans at an appropriate level	• Care plan should be flexible enough to adapt to changes in the care needed

Key components	Key elements	Comments
Interventions		
Early and sustained engagement	• Case management should be provided through the team • Assessment should take place in an appropriate low-stigmatising setting i.e. clients own home, primary care setting, youth service • Sustained engagement using an assertive outreach model so that service-users do not become lost to follow up • Service-users should not be discharged if fail to engage with interventions	• See Assertive Outreach Service Specification (section 4 of guidance) for more information on the assertive outreach approach • Using the strengths and interests of the service-user along with the potential benefits of service involvement to the user • Utilising engagement strategies around case management where needs indicated by the assessment
Psychological therapies	• Use of cognitive therapy to prevent transition to psychosis and target other co-morbid difficulties • Normalisation and psycho-education • Service-user involved in decision making and monitoring effects of therapy • Therapists should work collaboratively with clients and tackle the problems that the clients themselves identify and wish to work on in order to achieve their goals.	• Cognitive therapy has a proven evidence-base for preventing transition to psychosis in individuals at ultra-high risk of developing psychosis • Make use of the manual provided by French and Morrison (2004)
Family / carers / significant others involvement and support	• Family / carers / significant others should be involved in assessment and interventions as early as possible • Provision of psycho-education and family therapy and support • Involvement with other key agencies such as connexions	• Engagement of family / friends can enhance assessments and alleviate stress that may be present in families • Thought must be given to engaging and supporting those who the service-user identifies as being important
Case management	• Assessment and interventions should reflect all aspects of daily living • Care plan should address how these needs will be met • It is important to locate the case management within the team promoting independence at every opportunity, be wary not to foster dependence	• Difficult living or financial circumstances are known risk factors for mental health issues • Utilising local services and encouraging / facilitating service-users involvement with such services • Involvement in case management issues can be key engagement strategies
Providing pathway to involvement in valued education and occupation	• An education, training or vocational plan / pathway should be produced within 3 months	• Establishment of key local agencies such as connexions, careers advisory services, colleges and education • Ensure early discussion and referrals to increase chances of successful completion given how difficult it can be to return to education or work after a period of absence
Treating co-morbid difficulties	• Regular assessment of common difficulties including: • Substance misuse • Depression • Anxiety disorders • Interventions	• The service should have cores kills to assess and deal with common difficulties • If referral is necessary, the team should consider appropriate packages of care while other difficulties might be managed • Offer appropriate psychological and medication based interventions for current co-morbid difficulties.
Staying well plan	• Assessment and interventions should yield an individual staying well plan for the service-user and their file • Plans should incorporate service-user and significant others	• Assessments and interventions will reveal much personalised information which can be utilised by the service-user in the absence of a professional increasing autonomy and reducing the need for future care

Key components	Key elements	Comments
Interventions		
Monitoring of mental state	• Assessments should be regularly repeated to ensure the effectiveness of interventions and to monitor mental state over time • Monitoring should be offered for up to 3 years even where the service-user has not engaged with other aspects of the service	• Share the potential benefits to the service-user of engaging in repeated assessment periods • Consider referrals or signposting to other agencies when assessments indicate further need • Where service-users have refused to engage with the service offer various levels of involvement for monitoring i.e. phone contact
Crisis plan	• Service-user / family / significant others know how to access help if necessary • Intensive support in the community provided by the team during crisis • If acute care is required then joint assessment should take place between the at-risk team, crisis team and / or acute care team so that the least restrictive / stigmatising setting for care is arranged	• Avoidance of restrictive / stigmatising care wherever possible • Services provided in the community / service user's home as much as possible • Links with crisis team to ensure 24 hour crisis team available
Discharge	• The following discharge possibilities could be considered: • If well – discharge to GP with regular monitoring and final discharge post 3 year monitoring • If no longer meeting 'at risk' criteria but may require further care in relation to other difficulties consider referral onto appropriate team e.g. primary care psychology, while still offering monitoring • If the service user moves out of area during the period of intervention care should be transferred over to an appropriate team. • Where there is no appropriate early detection team transfer of care should be thoughtful with detailed information about plans of care and the rationale for this along with consultation if necessary	• Service users should be discharged with a staying well plan which would include information about accessing the service if the need arises and information about other relevant agencies they can contact for support

8.4 Management of Service and operational procedures

8.4.1 Joint commissioning

A joint commissioning approach involving PCGs/PCTs, HAs and social services should be adopted with commissioners being advised by the advisory group.

8.4.2 Model of service delivery

An at-risk service should be a discrete specialist team that has:

• *Staff members whose main responsibility is to people at-risk of developing psychosis*

• *An adequate skill mix that can deliver the requirements listed in table 1a*

• *Service-users involved in key tasks such as recruitment, service development and audit/research*

• *Strong relationships with mental health services and local resources which may be used by the clients in the service*

• *Clarification of roles and responsibilities within the team and to individual clients*

• *Its base within a primary care environment*

8.4.3 Caseload

In order to understand the caseload of an at-risk team it is imperative to have an understanding of local epidemiology as the size of population covered will depend on a number of different factors including:

- *Geography of the area*
- *Health and Social Service Boundaries*
- *Demography and epidemiology*

Teamwork is vital for success with key roles and responsibilities identified within the team and a clear understanding of the population they are serving in order to be able to target resources effectively.

It has been hard to predict prevalence rates for actual psychosis and the trajectories set for EIP teams in some cases have been relatively accurate and in some cases over or under estimations. Some of the variables that affect prediction of FEP rates will also be an issue for an ARMS service. Some of these will be rural versus urban populations, deprivation etc whilst other factors may relate to service configurations and pathways to care. Therefore we have used existing trajectories of FEP to establish the caseload for an ARMS service.

In a team with annual trajectories of FEP at 50 per year there would be an expectation that a dedicated early detection team would see around 65 new referrals per year. Therefore a simple formula to understand approximate caseload for an ARMS service would be to multiply FEP trajectory by 1.3.

8.4.4 Staffing

The at-risk team would consist of a skill mix appropriate for the clients that the service is focusing on e.g. Cognitive Therapists from various backgrounds, for example, clinical psychology, social work, nursing, assistant psychologists, and service user consultant. The Cognitive Therapists deliver therapy and conduct assessments. The assistant psychologists conduct assessments and regular monitoring of service users mental health, as well as conducting audit of the service. The service user consultant provides advice regarding service development and delivery, contributes to audit and research and promotes the service by liaison with referral agencies. Service users also play an active role in recruitment, by participating on job interview panels for therapists, and have shared their recovery stories during presentations and on camera, in order to promote hope for current service users.

A senior member of staff i.e. a senior clinical psychologist would provide line management of staff and is themselves managed through an appropriate pathway i.e. the Director for Early Intervention. This arrangement provides an independent identity for the team, which helps to avoid stigmatisation and to base services within primary care, but also provides continuity of care for those who develop psychosis and facilitates joint working where it is unclear whether a person is at risk or has developed psychosis.

The table (above right) gives details of suggested staffing levels and skill mix for a team with a caseload of 100 to 120.

1b Staffing

Position	Wte	Role
Clinical lead	0.5	Supervision, lead responsibilities
Therapists	2.5	Assessment, CT, case management
Assistant Psychologists	1.0	Assessment, monitoring, audit
Service-user consultant	0.5	Share recovery stories, research, service-user consultation on service development / teaching & training / recruitment
STR workers	1.0	
Administration	0.5	

8.4.5 Hours of operation

- *Core working hours should be 9am to 5pm, 5 days a week although where clients require out of hours appointments such needs should be prioritised in terms of resource allocation*

- *Out of hours – where risk issues indicate needs outside of the core working hours detailed above consideration should be given of short-term arrangements with a local early intervention team or crisis home treatment services.*

8.4.6 Referrals

An at-risk team should be a recovery focused, youth friendly service that takes direct referrals from a wide range of organisations; for example, GP/primary care, CMHT's, youth offending teams and Connexions. Referrals should also be taken from colleges and schools, drugs teams, housing agencies as well as self-referrals.

8.4.7 Risk assessment and policy on violence

- The at-risk team should have a written policy outlining the level of risk the team is able to manage
- Operational policy should explicitly address staff safety
- Operational policies should explicitly address an appropriate interface with the local early intervention team where risk may require co-working.

8.4.8 Staff training should include:

- *Aims of the service*

- *Training in the key elements outlined in table 1a above*

- *Team building, peer support and working within a team framework*

- *Understanding of various policies and procedures including; the Children Act, child protection, Mental Health Act …….*

- *Benefits to the individual their families and the wider community of this service*

- *Suicide awareness and prevention techniques*

Service user information

Service users and their family should be provided with the following information:

- *Description of the service, key elements and what to expect*

- *Name and contact details of a case manager and other relevant members of the team*

- *Contact details for out of hours advice / intervention*

- *Information about the approach of the team and the benefits of maintaining regular contact*

- *Ongoing care plan and information about interventions on offer*

- *Staying well plan and crisis plan*

- *How to express views on the service*

One of the fact sheets indicates some useful information for clients.

9.0 References

American Psychiatric Association (1994) *Diagnostic and statistical manual for mental disorders, 4th edition.* Washington DC: Author.

Barrowclough, C. & Tarrier, N. (1997) *Families of schizophrenic patients : cognitive behavioural intervention.* Cheltenham: S. Thornes 1997.

Bentall, R. P. (2004) *Roll over Kraepelin. Mental Health Today,* 20-23.

Bentall, R. P. & Morrison, A. P. (2002) More harm than good: The case against using antipsychotic drugs to prevent severe mental illness. *Journal of Mental Health,* 11, 351-365.

Bertolote, J. & McGorry, P. (2005) Early intervention and recovery for young people with early psychosis: consensus statement. *British Journal of Psychiatry,* 187, s116-119.

Birchwood, M., Smith, J., Macmillan, F., et al (1989) Predicting relapse in schizophrenia: The development and implementation of an early signs monitoring system using patients and families as observers. *Psychological Medicine,* 19, 649-656.

Birchwood, M., Todd, P. & Jackson, C. (1998) Early intervention in psychosis. The critical period hypothesis. *Br J Psychiatry Suppl,* 172, 53-59.

Brewin, J., Cantwell, R., Dalkin, T., et al (1997) Incidence of schizophrenia in Nottingham. A comparison of two cohorts, 1978-80 and 1992-94. *Br J Psychiatry,* 171, 140-144.

British Psychological Society (2000) Recent advances in understanding mental illness and psychotic experiences. Leicester: *British Psychological Society.*

Broome, M, Woolley, J, Johns, L., et al. (2005) Outreach and Support in South London (OASIS): Clinical audit of a service for people with prodromal symptoms. *European Psychiatry* 20: 372-378.

Brown, S. & Barraclough, B. (2000) Causes of the excess mortality of schizophrenia *The British Journal of Psychiatry* 177: 212-217

Burnett, R., Mallett, R., Bhugra, G., et al (1999) The first contact of patients with schizophrenia with psychiatric services: social factors and pathways to care in multi-ethnic population. *Psychol Med* **29**:475-483.

Cannon, T. D., Cornblatt, B. & McGorry, P. (2007) Editor's Introduction: The Empirical Status of the Ultra High-Risk (Prodromal) Research Paradigm. *Schizophr Bull,* **33**, 661-664.

Clark, D. M. (1999) Anxiety disorders: why they persist and how to treat them. *Behaviour Research and Therapy,* 37, 5-27.

Clark, D. M., Salkovskis, P. M., Hackmann, A., et al (1999) Brief cognitive therapy for panic disorder: A randomized controlled trial. *Journal of Consulting and Clinical Psychology,* **67**, 583-589 URLJ: http://www.apa org/journals/ccp html.

Cole, E., Leavey, G., King, M., et al (1995) Pathways to care for patients with a first episode of psychosis. *British Journal of Psychiatry,* **167**, 770-776.

Cornblatt, B. A., Lencz, T. & Kane, J. M. (2001) Treatment of the schizophrenia prodrome: is it presently ethical? *Schizophrenia Research,* **51**, 31-38.

Craig, T., Garety, P., Power, P. et al (2004) The Lambeth Early Onset (LEO) team: randomised controlled trial of the effectiveness of specialised care for early psychosis, *British Medical Journal,* **329**, 1067-1070

Crow, T. J., MacMillan, J. F., Johnson, A. L., et al (1986) The Northwick Park study of first episodes of schizophrenia II: A controlled of prophylactic neuroleptic treatment. *British Journal of Psychiatry,* **148**, 120-127.

Davies, L.M. & Drummond, M.F. Economics of schizophrenia: the real cost *The British Journal of Psychiatry* 1994: 165 (Supplement 25): 18-21

Department of Health (2001) The Mental Health Policy Implementation Guide. London: HMSO.

---- (2003) *Early intervention for people with psychosis: Expert briefing.* London: HMSO.

Drury, V., Birchwood, M., Cochrane, R., et al (1996) Cognitive therapy and recovery from acute psychosis: I. Impact on psychotic symptoms. *British Journal of Psychiatry,* **169**, 593-601.

Early Psychosis Prevention and Intervention Centre (EPPIC) (2005) What is Psychosis? Factsheet 1.

Fearon P, Kirkbride JK, Morgan C, et al (2006) 'Incidence of schizophrenia and other psychoses in ethnic minority groups: results from the MRC AESOP study.' *Psychological Medicine,* 11, 1541-1550.

Frame, L. & Morrison, A. P. (2001) Causes of posttraumatic stress disorder in psychotic patients. *Archives of General Psychiatry,* **58**, 305-306.

French, P. & Morrison, A. P. (2004) *Cognitive therapy for people at high-risk of psychosis.* London: Wiley.

Goldberg, D. P. & Hillier, V. F. (1979) A scaled version of the general health questionnaire. *Psychological Medicine,* **9**, 139-145.

Goldner, E. M., Hsu, L., Waraich, P., et al (2002) Prevalence and incidence studies of schizophrenic disorders: a systematic review of the literature. *Can J Psychiatry,* **47**, 833-843.

Gumley, A. I., O'Grady, M., McNay, L., et al (2003) Early intervention for relapse in schizophrenia: results of a 12-month randomised controlled trial of cognitive behaviour therapy. *Psychological Medicine,* **33**, 419-431.

Hafner, H. & Maurer, K. (2006) Early detection of schizophrenia: current evidence and future perspectives. *World Psychiatry,* **5**, 130-138.

Hamilton, M. (1960) A rating scale for depression. *J Neurol Neurosurg Psychiatry,* 23, 56-62.

Harrison, G., Hopper, K., Craig, T., et al (2001) Recovery from psychotic illness: A 15 and 25 year international follow up study, *British Journal of Psychiatry,* **178**, 506-517

Hollon, S. D., DeRubeis, R. J. & Evans, M. D. (1996) Cognitive therapy in the treatment and prevention of depression. In *Frontiers of Cognitive Therapy* (ed P. M. Salkovskis). New York: Guilford Press.

International (2005) International clinical practice guidelines for early psychosis. In *British Journal of Psychiatry,* pp. s120-s124.

Johannessen, J. O., (2004) The development of early intervention services. In J. Read, L. Mosher & R. Bentall (Eds), *Models of Madness. London:* ISPS and Brunner-Routledge.

Johns, L. C., Cannon, M., Singleton, N., et al (2004) Prevalence and correlates of self-reported psychotic symptoms in the British population. *Br J Psychiatry,* **185**, 298-305.

Johnstone, E. C., Crow, T. J., Frith, C. D., et al (1986) The Northwick Park study of first episodes of schizophrenia I: Presentation of the illness and problems relating to admission. *British Journal of Psychiatry,* **148**, 115-120.

Kay, S. R. & Opler, L. A. (1987) The Positive and Negative Syndrome Scale (PANSS) for schizophrenia. *Schizophrenia Bulletin,* **13**, 507-518.

Keks, N. & D'Souza, R. (2003) Spirituality and Psychosis. *Australasian Psychiatry,* **11**, 170-171.

King, M., Coker, E., Leavey, G., et al (1994) Incidence of psychotic illness in London: comparison of ethnic groups. *Bmj,* **309**, 1115-1119.

Knapp M., Schizophrenia: improving cost-effectiveness *Mental Health Research Review 6*, May 1999

Kuipers, E., Garety, P., Fowler, D., et al (1997a) The London-East Anglia randomised controlled trial of cognitive-behaviour therapy for psychosis I: Effects of the treatment phase. *British Journal of Psychiatry,* **171**, 319-327.

Loebel, A. D., Lieberman, J. A., Alvir, J. M. J., et al (1992) Duration of psychosis and outcome in first episode schizophrenia. *American Journal of Psychiatry,* **149**, 1183-1188.

Marshall, M., Lewis, S., Lockwood, A., et al (2004) Systematic review of the association between duration of untreated psychosis and outcome in cohorts of first episode patients. *Schizophrenia Research,* **70** (Suppl 1) 27

Marshall, M., Lewis, S., Lockwood, A., et al (2005) Association between duration of untreated psychosis and outcome in cohorts of first-episode patients: a systematic review. *Arch Gen Psychiatry,* **62**, 975-983.

McCreadie, R.G. The Nithsdale Schizophrenia surveys 1992 *Social Psychiatry and Psychiatric Epidemiology*

McCrone, P., Dhanasiri, S., & Knapp. (2007) Modelling the Economic Impact of Early Intervention Services *In submission*

McDaid, D., Oliver, A., Knapp, M., et al (2005) Minding mental health: towards an equitable approach. *Submitted for publication*.

McGlashan, T., Zipursky, R. B., Perkins, D., et al (2003a) Olanzapine versus placebo treatment of the schizophrenia prodrome: one year results. *International Congress on Schizophrenia Research,* 295.

McGlashan, T. H., Zipursky, R. B., Perkins, D., et al (2003b) The PRIME North America randomized double-bind clinical trial of olanzapine versus placebo in patients at risk of being prodromally symptomatic for psychosis. I. Study rationale and design. *Schizophrenia Research,* 61, 7-18.

McGlashen, T., Miller, T., Woods, S. W., et al (2001b) A scale for the assessment of prodromal symptoms and states. In *Early Intervention in Psychotic Disorders* (ed T. Miller), pp. 135-150. Dordrecht: Kluwar Academic Publishing.

McGorry, P. D., Chanen, A., McCarthy, E., et al (1991) Post traumatic stress disorder following recent onset psychosis. *Journal of Nervous and Mental Disease,* **179**, 253-258.

McGorry, P. D., Yung, A. R., Phillips, L. J., et al (2002) Randomized controlled trial of interventions designed to reduce the risk of progression to first-episode psychosis in a clinical sample with subthreshold symptoms. Archives of General Psychiatry, 59, 921-928.

Miller, T. J., McGlashan, T. H., Wood, S. W., et al (1999) Symptom assessment in schizophrenic prodromal states. *Psychiatric Quarterly,* **70**, 273-287.

Morrison, A. P., Bentall, R. P., French, P., et al (2002) A randomised controlled trial of early detection and cognitive therapy for preventing transition to psychosis in high risk individuals: Study design and interim analysis of transition rate and psychological risk factors. *British Journal of Psychiatry,* **181**, 78-84.

Morrison, A. P., French, P., Walford, L., et al (2004a) Cognitive therapy for the prevention of psychosis in people at ultra-high risk: Randomised controlled trial. *British Journal of Psychiatry,* **185**, 291-297.

Mortensen PB (1995) Suicide among schizophrenic patients: Occurrence and risk factors *Clinical Neuropharmacology* 18: S1-S8 **Suppl. 3**

Mortensen, P., & Juel, K., (1993) Mortality and the causes of death in first admitted schizophrenic patients. *British Journal of Psychiatry,* **163**, 183-9.

Overall, J. E. & Gorham, D. R. (1962) The Brief Psychiatric Rating Scale. *Psychological Reports,* **10**, 267-278.

Patel, A. & Knapp, M. (1998) The costs of mental illness in England. *PSSRU Discussion Papers.*

Peet, M (2004) Diet, diabetes and schizophrenia: review and hypothesis *The British Journal of Psychiatry* 184: s102-S105

Petit-Zeman S, Sandamas G, Hogman G (2002) Doesn't it make you sick? London: *Rethink Publications*

Phillips, L., Yung, A. R., Hearn, N., et al (1999) Preventative mental health care: accessing the target population. *Aust N Z J Psychiatry,* **33**, 912-917.

Phillips, L. J., Yung, A. R. & McGorry, P. D. (2000) Identification of young people at risk of psychosis: validation of Personal Assessment and Crisis Evaluation Clinic intake criteria. *Aust N Z J Psychiatry,* **34 Suppl**, S164-169.

Power, P., (2004) Suicide Prevention in First Episode Psychosis: In *Psychological Interventions in Early Psychosis* Editors: P. McGorry & John Gleeson. Wiley Press.

Rethink Under pressure : *RETHINK* November 2003

Riecher-Rossler, A., Gschwandtner, U., Aston, J., et al (2007) The Basel early-detection-of-psychosis (FEPSY)-study--design and preliminary results. *Acta Psychiatr Scand,* **115**, 114-125.

Robinson, D., Woerner, M., Alvir, J., et al (1999) Predictors of relapse following response from a first episode of Schizophrenia or Schizoaffective Disorder. *Archives of General Psychiatry,* **56**, 241-247

Sensky, T., Turkington, D., Kingdon, D., et al (2000) A Randomized Controlled Trial of Cognitive-Behavioral Therapy for Persistent Symptoms in Schizophrenia Resistant to Medication. *Archives of General Psychiatry,* **57**, 165-172.

Skeate, A., Jackson, C., Birchwood, M., et al (2002) Duration of untreated psychosis and pathways to care in first-episode psychosis: Investigation of help-seeking behaviour in primary care. *British Journal of Psychiatry,* **181**, s73-s77.

Tarrier, N., Yusupoff, L., Kinner, C., et al (1998) A randomized controlled trial of intense cognitive behaviour therapy for chronic schizophrenia. *British Medical Journal,* **317**, 303-307.

Tiffin, P., Glover, G., (2007) From Commitment to Reality: early intervention in psychosis services in England, *Early Intervention in Psychiatry,* **1**, 104-107

Ustun, T. B. (1999) The global burden of mental disorders. *Am J Public Health,* **89**, 1315-1318.

Van Os, J., Hanssen, M., Bijl, R. V., et al (2000) Strauss (1969) revisited: A psychosis continuum in the normal population? *Schizophrenia Research,* **45**, 11-20.

Wiersma., D, Nienhuis., F, Sloof., C, Giel., R., (1998) Natural course of schizophrenic disorders: a 15 year follow-up of a Dutch incidence cohort. *Schizophrenia Bulletin,* **24**, 75-85

World Health Organization (2002) World Health Report 2001. *Mental Health: New Understanding*. New Hope.Geneva:WHO

Wyatt, R. (1991) Neuroleptics and the natural course of schizophrenia. *Schizophrenia Bulletin,* **17**, 325-351.

Yung, A., Organ, B., Harris, M., (2003) Management of early psychosis in a generic adult mental health service. *Australian & New Zealand Journal of Psychiatry,* **37**, 429-436

Yung, A., McGorry, P. D., McFarlane, C. A., et al (1996) Monitoring and care of young people at incipient risk of psychosis. *Schizophrenia Bulletin,* **22**, 283-303.

Yung, A., Phillips, L., Yuen, H. P., et al (2003a) Risk factors for psychosis in an ultra high-risk group: psychopathology and clinical features. *Schizophrenia Research,* **67**, 131-142.

Yung, A., Phillips, L. J., McGorry, P. D., et al (2001) Comprehensive Assessment of At-Risk Mental States (CAARMS). In *Department of Psychiatry, University of Melbourne, Australia: The PACE Clinic.*

---- (1998) A step towards indicated prevention of schizophrenia. *British Journal of Psychiatry,* **172**, 14-20.

Yung, A. R., Phillips, L. J., Yuen, H. P., et al (2003b) Psychosis prediction: 12-month follow up of a high-risk ("prodromal") group. *Schizophr Res,* **60**, 21-32.

---- (2004) Risk factors for psychosis in an ultra-high-risk group: psychopathology and clinical features. *Schizophr Res,* **67**, 131-142.

Yung, A. R., Yuen, H. P., Berger, G., et al (2007) Declining Transition Rate in Ultra High Risk (Prodromal) Services: Dilution or Reduction of Risk? *Schizophr Bull*.

Yung, A. R., Yuen, H. P., McGorry, P. D., et al (2005) Mapping the onset of psychosis: the Comprehensive Assessment of At-Risk Mental States. *Australian and New Zealand Journal of Psychiatry,* **39**, 964-971.