



Early Intervention in Psychosis | *Achieving Ordinary Lives*

# EARLY INTERVENTION IN PSYCHOSIS

August 6

# 2010

This briefing is intended to inform service planners about the Early Intervention in Psychosis (EIP) service model, which has spearheaded a revolution in how mental health services have been delivered across England over the last ten years. The EIP service model can address many of the efficiency challenges facing service planners currently, supported by a robust evidence base of clinical effectiveness and cost impact. Moreover this is a field of modern psychiatry where users and their families can have confidence in a service approach which demonstrates its effectiveness against consumer-prioritised quality indicators.

**A BRIEFING  
FOR  
SERVICE  
PLANNERS**

# **Early intervention in psychosis**

## **A briefing for service planners**

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## Introduction

We offer this briefing at a critical time for the NHS when the need to pursue efficiency has never been greater. The Early Intervention in Psychosis (EIP) service model, developed across England over the last ten years, addresses many of the efficiency challenges facing service planners currently. Moreover this is a field of modern psychiatry where we can have confidence in a service approach which demonstrates its effectiveness against consumer-prioritised quality indicators, further supported by a robust evidence base of clinical effectiveness and cost impact.

There are two key messages we want to provide.

1. EIP is an evidence-based service approach that does what it says on the tin.
2. The EIP service innovation is seen as a beginning of mental health service transformation and not an endpoint

Professor Louis Appleby (29th April 2009 Birmingham 'Track' conference) in a reflection on the achievements of the National Service Framework described EIP as the *"jewel in the crown of the NHS mental health reform"* because:

- 1) Service users like it
- 2) People get better
- 3) It saves money

**'The evidence is pretty compelling that by intervening early you can make a real difference; you can avoid someone being admitted into acute hospital care so this is really a no brainer. It makes sense to invest in early interventions to go back upstream and make sure we prevent these sorts of problems'.**

**Rt Hon Paul Burstow Radio 4 All in the Mind June 2010**

## What is the essence of EIP?

A mother of two sons with psychosis recently wrote an article about her experience with an early intervention service in relation to her second son developing a psychosis, aged 15yrs. She was able to draw for comparison on her experience of and outcomes from a more traditional CMHT service involved with her elder son's care (Gladden 2009). In her opening statement she wrote:

***"The shock of my second son developing psychosis at the age of 15, as his elder brother had fifteen years earlier, pushed me into a deep depression. Our eldest son is still unable to work because of his health and ...has never been well enough yet to achieve his potential...So how did we get to today, three years on, where hope is back?"***  
(Gladden 2008)

She describes a number of key elements which she identifies as crucial to her positive experience of an EIP service (EIS) and the outcomes achieved by her younger son:

- Early detection of psychosis before problems become entrenched or severe, where EI and CAMHS services operate seamlessly and effectively across a traditional age and service transition and where the EIP service co-ordinates care and input from different agencies involved in the young person's care:

***"...our GP made a very quick referral to CAMHS and L. was referred to EIS. We had support from CAMHS and EIS, where EIS helped us to work with other agencies to put in place much needed additional support."***

- A family centred approach which offered realistic hope and optimism about the potential for recovery:

***"EIS involved the whole family in L's recovery... EIS gave us an individual map to help us find the way out of the hopeless place we were in. His hopes for the future are back"***

- A focus on broader outcomes supporting ordinary lives and recovery from psychosis:

***"L. is about to start University after managing to achieve A grades in his GCSEs and A Levels despite his illness, long absences from school and side effects of medication"***

- Utilising evidence based interventions such as Individualised Placement Support (IPS), Cognitive Behavioural Therapy and Family Intervention which demonstrate their cost effectiveness in terms of outcome and family satisfaction:

***"Earning a place on a Masters Degree in Physics with Particle Physics and Cosmology at the University of Birmingham is pretty hard evidence that EI and family therapy has been worth any extra initial cost to the NHS"***

## General overview

Put simply 'Early intervention in Psychosis' provides an evidence-based paradigm of care whose aim is to achieve early secondary prevention of potential deficits by delivering more effective 'upstream' care which can be conceptualised into three broad themes:

- Early detection of psychosis
- Reduce the long duration of untreated psychosis (DUP)
- Importance of the first 3-5 years following onset (critical period) for later biological, psychological and social outcomes

We know psychosis affects young people (75% men and 66% women have their first episode by age 35 years, mostly in their late teens and twenties) at a critical time in their development with potentially devastating and long-lasting consequences.(Kirkbride et al 2006) Consequently EIP services were developed to work with young people aged between 14 and 35 experiencing a first episode of psychosis and their families. They provide a range of services, including psychological therapies, anti-psychotic medications and social interventions, tailored to individual needs with a view to facilitating recovery.

## Context:

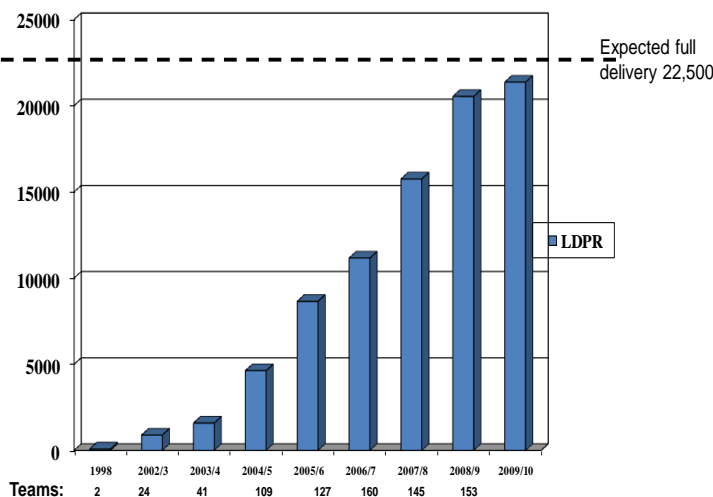
EIP has been a consumer-led service reform driven by a demand for greater social justice for these young people and their families.



In the 1990s organisations like Rethink challenged traditional service boundaries between CAMHS and adult CMHTs for their 'one size fits all' service-led approach. As this poster highlights the typical experience was of late intervention in a crisis, resulting in excessive hospital admissions and over-reliance on medicines.

In response to both consumer pressure and emerging clinical evidence from around the world the NSF (1999) initiated a policy implementation agenda committed to a radical service redesign. Its NHS Plan (DH 2000) promised it would '*Reduce the duration of untreated psychosis (DUP) to a service median of less than 3 months... and provide support for the first three years*' (DH, 2002).

### Growth in EIP cases and services 1998-2010 (21,372 cases March 2010)



From 1998, as the NSF got underway, 2 EI teams provided care for about 80 young people. In March 2010 DH Local Delivery Plan Returns revealed 21,372 people were in receipt of EI services by 151 teams from across England. (against a projected estimate of 22,500)

Thus we now have full national implementation, albeit individual services may be at different stages of maturity and robustness

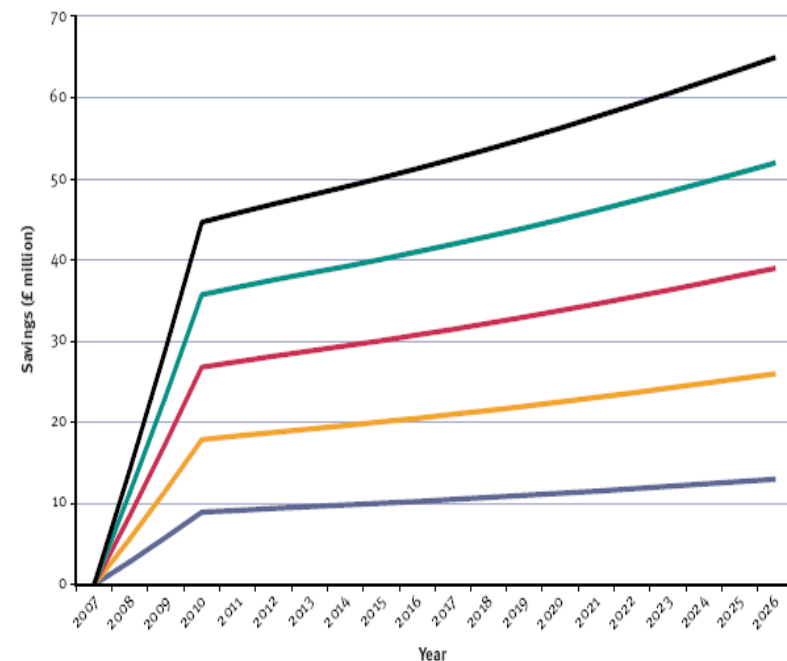
This consumer demand for a person-centred service, sensitive to age and phase of illness was articulated in the Newcastle Declaration (Rethink, NIMHE, IRIS 2002), and later to become the Early Psychosis Declaration (Bertolote 2005) (endorsed WHO 2004). This declaration lies at the heart of the EIP service reform, not only providing its value base, but also prioritising a set of outcomes. That is why outcomes such as user and family satisfaction, timely access to services, educational attainment and having a job have enjoyed such a high service priority.

## Evidence base

- Harrison et al (2001) showed how the outcome at 2-3 years strongly predicts outcome twenty years later. Delay in first treatment is linked strongly with poor outcomes
- Short term improved outcomes in comparison to standard care have been widely reported in symptom reductions, vocational and social functioning, reduced inpatient care and treatment dropout (Craig et al, 2004; Dodgson, et al, 2008; Garety et al, 2006; Jeppesen et al, 2005; Mihalopoulos et al, 2009; Petersen et al, 2005 and Thorup et al, 2005).
- Mihalopoulos *et al* (2009) recently demonstrated that a range of patient outcomes and cost savings were sustained at almost eight years after initial treatment from an EIP service.
- A systematic appraisal of the evidence for EIP was undertaken for the Cochrane Database (Marshall et al, 2005). It found strong evidence for the link between a long duration of untreated psychosis (DUP) and poor outcomes. There is also encouraging evidence for the impact of EIP teams, for example in terms of reduced bed days and improved mental states.
- The Scandinavian Treatment and Intervention in Psychosis (TIPS: Melle et al, 2008) is a quasi-experimental comprehensive meta-analytic study. It has also demonstrated the importance of reducing DUP.
- The Danish OPUS study (Petersen, 2005) is a randomised controlled trial that compares early intervention with standard treatment. The study convincingly demonstrated a beneficial effect after 2 years. The intervention group had a significantly lower level of psychotic and negative symptoms, fewer in-patient days, better treatment adherence and higher level of user satisfaction.
- Research conducted by the Lambeth Early Onset service (LEO: Craig et al 2004) clearly indicate that EIP delivers better outcomes than standard CMHT care. EIP clients were more often in regular contact with the clinical team, and were more likely to attend appointments. They were more likely to have been offered psychosocial interventions and to be in recovery. They also had fewer admissions and better social and vocational functioning. However at 5 years the outcomes from LEO show some loss of earlier gains (Gafoor, 2010) highlighting how these early gains from EIP can be fragile and may benefit from continuing the EIP approach for some clients beyond the current recommended three years.
- The first UK study to specifically analyse the economic impact of EIP has modelled the costs associated with Early Intervention and standard care over a one-year and a three-year period. They found that the participants in the specialised programme group had more contacts with psychiatrists, psychologists, healthcare assistants, community mental health nurses and day-care services. They had less need for in-patient services, and their in-patient costs were only two-thirds of the costs of the standard care group. The overall costs were in favour of the specialised care group. Over three years the cost per client was calculated at £26,568 for EIP and £40,816 for usual (CMHT) care (McCrone, 2009 and 2010).
- Fowler et al (2009) have shown that comprehensive implementation is important. Their research has compared different models of implementation for EIP including CMHT based workers, partial models and comprehensive specialist teams. They found substantial improvements in functional outcomes and a large reduction in admissions for clients in receipt of comprehensive EIP.

- The Kings Fund report, 'Paying the Price' (McCrone *et al*, 2008):

**Potential Savings (per year) from expanding EIP services in England over next 20 years (McCrone *et al*, 2008)**



*“Early intervention services for psychosis have also demonstrated their effectiveness in helping to reduce costs and demands on mental health services in the medium to long-term, and should be extended to provide care for people as soon as their illness emerges.”*

100% coverage   90% coverage   80% coverage   70% coverage   60% coverage

## **EIP in practice (see Appendix for fuller consideration of service model)**

The aims of an EIP service are to:

- Encourage liaison between primary/specialist care in the early detection and management of the first psychotic episode to reduce the Duration of Untreated Psychosis (DUP).
- Provide timely and effective interventions appropriate to the early phase of a psychosis to accelerate remission and prevent relapse. These interventions include pharmacotherapy, evidence based adjunctive psychosocial interventions including Cognitive behavioural Therapy (CBT), early signs monitoring and family intervention.
- Normalise experiences for young people, minimise stigma and reduce the adverse consequences in terms of trauma, depression and suicide risk.
- Maximise family, social, educational and work functioning.

NICE (2009) believes the model of service delivery may be critical to achieving positive EIP outcomes:

**“the Guideline Development Group (GDG) recognised that the rationale for an early intervention service is powerful, both ethically (helping people with serious mental health problems at an early stage to reduce distress and possibly disability) and in terms of flexibility and choice (service users and carers want help sooner than is usually available). New evidence from the clinical review**

clearly demonstrates that early intervention can be effective with benefits lasting at least 2 years" (NICE, 2009, page 66).

Most EIP services in England are based on an urban stand-alone model offering dedicated EIP provision solely with individuals with first episode psychosis and their families: multi-disciplinary working combines nursing, occupational therapy, social work, psychology and psychiatry. However some EIP services in rural areas, to accommodate dispersed communities, restricted public transport limiting poor local service infrastructure, lack of amenities and social, housing and employment, have adopted partial models such as 'hub & spoke' where dedicated EIP team workers (spokes) are based within generic CMHT teams but linked to an EIP 'hub' for access to specialist EIP skills, support and supervision. From the perspective of the service planner the key message is that where there is a lack of evidence for a particular service model then demonstration that the service delivers to the consumer-led outcomes described in the Early Psychosis Declaration.

<b>Delivering quality</b>			
Worcestershire EIS Outcome Data (Smith, 2006; Smith, 2009)			
	<u>National audit data</u>	<u>2006 (n=78)</u> <u>(22% 14–18yrs)</u>	<u>2008 (n=106)</u> <u>(18% 14–18yrs)</u>
DUP (median)	12-18m	6m	5m
% admitted with FEP (entry point to EI)	80%	41%	17.5%
% admitted on MHA	50%	27%	10%
Re-admission	50% (in 2 years)	28%	17%
% engaged @ 12m	50%	100% (79% well engaged)	99% (70% well engaged)
Family involved (satisfied)	49%(56%)	91% (71%)	84%
Employment (education & training)	8-18%	55%	56%
Suicide attempted completed	48% 6% (in first 5y)	21% 0%	7% 0%

This table shows the quality outcomes that a stand-alone EIP service model evaluates itself by and which commissioners can feel confident they can commission for

Despite NICE's 2009 review there remain professionals and organisations who still hold onto traditional service approaches by for instance advocating *'the model of an enlarged CMHT should be further explored'* (RC Psychs *Looking ahead* OP75 2010). These were of course the very service structures that consumers challenged for delivering unacceptable 'late intervention'. Moreover NICE in its recent review of the evidence for treating schizophrenia (NICE, 2009) could find little to commend the CMHT model of care:

**"Despite the fact that CMHT's remain the mainstay of community mental health care (for psychosis), there is surprisingly little evidence to show that they are an effective way of organising services (for psychosis)." (NICE, 2009, page 261)**

This is further underlined by recent evidence from Norfolk (Fowler et al 2009) about the evolution over ten years of a comprehensive stand alone EIP service out of the original CMHT service. Only 15% of individuals made a full or partial functional recovery at two years under the care of a traditional generic CMHT in 1998. In 2007, 52% of the cases were making a full or partial functional recovery under the care of a comprehensive EIP team. A large reduction in inpatient admissions was a further measured benefit from EIP. Moreover partial implementation of EIP, using specialist EIP workers in collaboration with traditional CMHT care, reported intermediate impact.

## Future developments

**Embedding EIP in a wider youth mental health service:** Many of the issues facing young people with emerging psychosis apply also to other disorders where historically the care pathways have also been poor, reflecting difficulties in negotiating traditional interfaces between primary and specialist care, as well as inter-specialist interfaces e.g. between Children/Adolescents' and Adult Mental Health Services. Whilst the evidence base is strongest for early intervention in psychosis, a research focus now includes other major mental disorders that have their onset in adolescence (McGorry 2007).

*“Roughly half of all lifetime mental disorders in most studies start by the mid-teens and three quarters by the mid-20s. Later onsets are mostly secondary conditions. Severe disorders are typically preceded by less severe disorders that are seldom brought to clinical attention”*

(Kessler et al, *Current Opinion Psychiatry*, 2007).

Important epidemiological studies like that of the Dunedin longitudinal cohort (Kim-Cohen et al 2003), by showing that most young adults with a psychiatric disorder had diagnosable problems much earlier in life, bring into question the current service divisions between CAMHS and adult services. Examples of how these boundaries can be removed are exemplified by youth mental health services such as *The Zone Youth Enquiry Service* of Plymouth and *Youthspace* in Birmingham. These service models allow an EIP service to sit behind and be fronted through a generic youth service. They can offer a range of information, advice and support to young people including help with housing, sexual health, welfare rights, educational and employment support. If, in the course of contact with a young person an emerging psychosis is identified, youth workers can request specialist assessment and support from EIP specialists who will come in and see the young person with a youth worker within a non stigmatised youth service setting.

### **Commissioning better transition between CAMHS and Adult Mental Health Services (AMHS)**

We want to highlight for future development the need to improve the integration of provision across this particular interface. Too many young people and their families still find the issue of transition a mountain that needs to be crossed, despite there being examples of exemplary service innovation like early intervention in psychosis. Kessler's review (Kessler et al 2007) reinforces that the epidemiological argument that was used for psychosis holds true for the majority of mental disorders – namely that they will first appear in adolescence and young adulthood, at a critical time in an individual's maturation and development. Sadly many of these young people and their families find themselves trying to navigate services with completely different philosophies, and too many clinical pathways with dead ends.

*“Agencies pass you from one establishment to another – no one seems able to give you an answer”* Quote from a parent in CAMHS Review 2008

Many young people experience the exact opposite of a person-centred approach as services strive to contain demand based on differing criteria of diagnosis and varying symptom thresholds between services. This frequently disheartens and disengages young people and their families who are often left managing their child and their own emotional wellbeing with very little direction.

The TRACK study (Singh et al 2009) shows serious system failure and underlines how commissioning has simply not delivered alignment of service providers for CAMHS and AMHS, who usually come from more than one source, and are driven by different policies for children and adults, governance structures, targets and expected outcomes. Transition between CAMHS and

AMHS is raised continually as an issue by service users, providers, commissioners and policy makers.

**“If you do one thing, just get people who know what they are doing to work together better”** Quote from a parent in CAMHS Review 2008

**Acute Care:** There has been some limited progress in finding appropriate inpatient care for the under 18s. However inappropriate placements on adult mental health wards, out of area placements, or inappropriate paediatric ward placements, particularly for under 16s still happen. Such placements lead to high NHS costs as most under 18s will be under high observation at high cost. And out of area placements lead to longer stays and difficulties reintegrating into the community.

**Tackling health inequalities:** The Disability Rights Commission provided evidence of system failures for addressing the physical needs of people with severe mental illness.

- **People with schizophrenia and bipolar disorder die up to 25 years earlier than the general population.**
- **More premature deaths are due to treatable cardiovascular, pulmonary and infectious diseases (66%) than from suicide and injury (33%).**

Applying an early intervention model to these adverse physical pathways offers a realistic new approach to this issue, given that we can identify a group of young people with psychosis at high risk for future premature death due to physical disorders (Shiers et al 2009). This requires a collaborative approach between primary care and EIP services, whilst putting the onus on primary care (NICE schizophrenia guidelines 2009) to improve its systems for assessing potentially treatable risks, and delivering active health promotion to address risks from smoking tobacco, drug and alcohol misuse, poor diet and low physical activity.

**Tackling social inequalities:** Unemployment is the major disability faced by people with psychotic illness (Killackey et al., 2006), and the most expensive part of the illness (Wu et al., 2005). The onset of psychosis in late adolescence and early adulthood causes a pronounced decline in employment and educational attainment (Mueser *et al.*, 2001; Kessler *et al.*, 1995). Employment rates fall precipitously from about 50% at onset down to rates measured after 12 months between 4-25% (Killackey et al., 2006, Marwaha and Johnson, 2004, Perkins and Rinaldi, 2002). The consequences of unemployment include poorer social and economic inclusion, greater symptomatology, decreased autonomy and generally poorer life functioning.

Thus unemployment is a key problem for first episode psychosis (FEP) since the onset of illness occurs at a crucial stage of vocational development. Effective and acceptable vocational intervention using evidence based Individual Placement Support (IPS) is of vital importance to the social and occupational recovery of those newly diagnosed with psychosis (Rinaldi et al 2010). Early vocational intervention produces invaluable preventative benefits not possible at a later stage of illness, by supporting normal social roles and meeting development needs. These benefits include avoidance of going onto welfare benefits and the opportunity for career planning, rather than mere employment. Therefore by supporting their clients to engage in education and achieve employment EIP services can play a vital role in promoting recovery and independence.

### **Early detection and treatment of people at high risk of developing psychosis:**

Evidence is strengthening for the benefits of very early detection and treatment of psychosis, particularly those who are at ultra-high risk of developing psychosis. Studies have shown that a group of people can be identified with a roughly 30% risk for developing psychosis over the following 12 months [using such specialist measures as the Comprehensive Assessment of At Risk Mental States (Yung, et al., 2005) and measures more appropriate for primary care clinicians (French and Morrison 2004)]. By offering this *at risk* group appropriate interventions it now appears possible to reduce the rate of transition to about 12% (McGorry, et al., 2002; Morrison, et al., 2002; Woods, et al., 2003). Conclusions of a recent review of intervention strategies (McGorry, et al., 2009) emphasised the value of psychological and novel treatments for this group. These findings have encouraged a number of clinical services to work with people at risk of developing psychosis (Killackey & Yung, 2007; Phillips, et al., 2002).

A further important prevention aspect of this work is to consider the fate of those who **do not** go on to develop psychosis. Taken as a whole this at risk group have an average age of about 20, are predominantly male and are troubled by multiple competing problems. They are seriously impaired with an average Global Assessment of Functioning (GAF) score of around 50 (range 0-100); high levels of depression and anxiety. (eg 54% feel moderately anxious or depressed and 33% feel extremely anxious or depressed); around 44% describe “suicidal thoughts with vague plans” and 13% describe “thoughts of suicide more frequent with associated plan”. Clearly we should be concerned about this group of people whether an individual goes on to develop psychosis or not.

In summary it is possible to identify a particularly troubled group of young people by virtue of their at risk mental state and apply effective interventions that prevent future serious mental ill-health in the longer term. This is an important area of work that fits within the emerging strategic prevention framework around youth mental health.

## **Conclusions**

Service planners can have confidence that the Early Intervention in Psychosis (EIP) service model addresses many of the efficiency challenges facing them currently. There is not only a robust evidence base of clinical effectiveness and cost impact but also a history of users and families being strongly involved in this service development in defining a set of consumer-led outcomes via the Early Psychosis Declaration. Key lessons learned over the last ten years include:

1. Prevention and early intervention strategies are effective for people with the most severe mental disorders
2. Services should be planned according to consumer-led outcomes set within an evidence based approach to clinical practice.
3. Cost-effectiveness should be a key consideration in service planning

EIP service provision is now established as a ‘normal’ part of the architecture of specialist services so that most young people with a first episode of psychosis in England can access a local EIP service. The robust research base has been translated into clinical practice, where a national ‘upstream’ service investment has been rewarded

by better clinical outcomes, increased consumer satisfaction and reduction in downstream health utilisation. This provides a key opportunity for cash-strapped service planners who want to provide high quality and innovative services.

Whilst great strides have been made this is not a time for complacency. As we have described in the *Future developments* section (qv) there are further challenges to consider, not least how EIP services interface with other parts of the mental health system. For instance early reductions in suicide rates in the initial 3 years of an EIP service can be lost by a rebound over the next few years that follow (Harris et al 2008). This highlights the importance of understanding how the successful elements of the EIP service approach can inform service development further along the care pathway, including the rehabilitation and recovery phases. A number of these young people will remain needy, vulnerable and with persistent symptoms/distress beyond the current tenure of a typical EIP service model (internationally between 1.5–3 years). The principles and practices of EIP, with interventions directed towards more individually focused and hopeful ways of working and towards as complete a recovery as possible over whatever time it takes, should set ripples flowing out to all phases of care, for mental health teams of all age groups and in all sub-specialties of psychiatry. The current challenge in England is to build on the success of EIP service innovation where EIP is seen as a beginning of mental health service transformation and not an endpoint.

### Acknowledgements

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### Useful Resources

- Addington J (2007) The promise of early intervention *Early Intervention in Psychiatry*; 1: 294–307
- Birchwood M, Fowler D and Jackson C (2000) (eds) *Early Intervention in Psychosis. A Guide to Concepts, Evidence and Interventions*. John Wiley and Sons Ltd., Chichester.
- [Early Psychosis Declaration: support materials from IRIS website](#)
- Edwards J and McGorry P.D. (2002) *Implementing Early Intervention in psychosis. A guide to Establishing Early Psychosis Services*. Martin Dunitz Ltd., London
- [French, P., Smith, J., Shiers, D. Read, M. and Rayne, M. eds. \(2010\) \*Promoting Recovery in Early Intervention. A Practice Manual\*. Blackwell Press, Oxford](#)
- IRIS (2000) *Early Intervention Psychosis: Clinical Guidelines. Service Frameworks*. IRIS/Rethink, Birmingham
- NICE (NHS National Institute for Health and Clinical Excellence, 2009) *Schizophrenia Guidance (Update) CG 82* <http://www.nice.org.uk/CG82>

- Sainsbury Centre for Mental Health (2003) *A Window of Opportunity: A Practical Guide for Developing Early Intervention in Psychosis Services*. SCMh, London

### Useful Websites:

[www.iris-initiative.org.uk](http://www.iris-initiative.org.uk) – UK site promoting good practice in EIP services. Guidance on early detection and intervention, downloadable factsheets and power point presentations.

[www.eppic.org.au](http://www.eppic.org.au) – Website of influential Australian EIP service for people with first episode psychosis with comprehensive downloadable information sheets for young people and families.

[www.am-i-ok.co.uk](http://www.am-i-ok.co.uk) – Buckinghamshire EIP service website

[www.wheres-your-head-at.com](http://www.wheres-your-head-at.com) Birmingham Youth mental health service mental health awareness website

## References

Appleby L (2009). Quoted in: *Early Intervention in Psychosis in England – Report from a day seminar on research, policy and practice*. London: CSIP.

Bertolote, J., & McGorry, P. (2005) Early Psychosis Declaration (EPD). International Consensus Statement; Brit Journal of Psychiatry, 187 (suppl.48), s116-s119.

Birchwood M, McGorry P & Jackson H (1997). *Early intervention in Schizophrenia*. British Journal of Psychiatry, **170**, 2-5.

Bosanquet N (2000). *Early intervention: the economic issues*. In Birchwood M, Fowler D & Jackson C (Eds), *Early intervention in psychosis*. Chichester: Wiley.

Craig TKJ, Garety P, Power P, Rahaman N, Susannah C, Fornells-Ambrojo M, et al (2004). *The Lambeth Early Onset (LEO) Team: randomised controlled trial of the effectiveness of specialised care for early psychosis*. BMJ **329**: 1067.

Brooker C (2008). *Mental Health: From Policy to Practice*. Churchill Livingstone

Department of Health (1999) *National Service Framework for Mental Health* London: Department of Health

Department of Health (2000) *NHS plan* London: Department of Health

Department of Health (2001) *Mental Health Policy Implementation Guide*. London, Department of Health

Department of Health (2009). *New Horizons: A Shared Vision for Mental Health* London: Department of Health

Disability Rights Commission. *Equal treatment: closing the gap*. A formal investigation into physical health inequalities experienced by people with learning disabilities and/or mental health problems. London: DRC, 2005.

- Dodgson G, Crebbin K, Pickering C, Mitford E, Brabban A, Paxton R (2008) Early intervention in psychosis service and psychiatric admissions. *Psychiatric Bulletin*, 32, 413-416
- Fowler D, Hodgekins J, Howells L, Millward M, Ivins A, Taylor G, Hackmann C, Hill K, Bishop N and Macmillan I. (2009). *Can targeted early intervention improve functional recovery in psychosis? A historical control evaluation of the effectiveness of different models of early intervention service provision in Norfolk 1998–2007*. *Early Intervention in Psychiatry* **3**: 282–288
- French P, Smith J, Shiers D, Reed M, Rayne M (2010). *Promoting Recovery in Early Psychosis*. Wiley-Blackwell
- French P & Morrison AP (2004). *Early Detection and Cognitive Therapy for People at High Risk of Developing Psychosis*. Wiley
- Friis S (2010) *Early specialised treatment for first-episode psychosis: does it make a difference?* *Br J Psychiatry* **196**, 339–340
- Gafoor R, Nitsch D, McCrone P, Craig TKJ, Garety PA, Power P, et al. (2010) *Effect of early intervention on 5-year outcome in non-affective psychosis*. *Br J Psychiatry*; **196**: 372–6.
- Garety PA, Craig TK, Dunn G, Fornells-Ambrojo M, Colbert S, Rahaman N, Reed J, Power P (2006) Specialised care for early psychosis: symptoms, social functioning and patient satisfaction: randomised controlled trial. *Br J Psychiatry*; **188**: 37-45
- Gladden, M (2009) *Experiences of Mental Health Services for Psychosis: Differences Between Traditional and Early Intervention Services* West Midlands: Meriden Family Intervention Programme Newsletter, Feb 09, Vol 3, issue 7.
- Harris, Burgess, Chant, Pirkis, McGorry, P (2008) Impact of a specialized early psychosis treatment programme on suicide. Retrospective cohort study *Early Intervention in Psychiatry*; **2**: 11–21
- 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
- IRIS Initiative to Reduce the Impact of Schizophrenia (2000) *Early Intervention in Psychosis: Clinical Guidelines and Service Frameworks* Birmingham: West Midlands Partnership for Mental Health
- Jeppesen P, Petersen L, Thorup A et al (2005). *Integrated treatment of first-episode psychosis: effect of treatment on family burden-OPUS trial*. *British Journal of Psychiatry*, **187**, S85-S90
- Kessler, R.C., Foster, C.L., Saunders, W.B. & Stang, P.E.. (1995) Social consequences of psychiatric disorders. I. Educational attainment. *American Journal of Psychiatry*, 152, 1026-31
- Kessler RC, Amminger GP, Aguilar-Gaxiola S, Alonso J, Lee S, Üstün TB. (2007) [Age of onset of mental disorders: a review of recent literature](#) *Current Opinion in Psychiatry*. **20(4)**:359-364.
- Killackey, E. J., Jackson, H. J., Gleeson, J., Hickie, I. B. & McGorry, P. D. (2006) Exciting Career Opportunity Beckons! Early Intervention and Vocational Rehabilitation in First Episode Psychosis: Employing Cautious Optimism. *Australian and New Zealand Journal of Psychiatry*, 40, 951-962.
- Killackey, E., & Yung, A. R. (2007). Effectiveness of early intervention in psychosis. *Curr Opin Psychiatry*, 20(2), 121-125.
- Kim-Cohen J, Caspi A, Moffitt T, Harrington H et al (2003) Prior Juvenile Diagnoses in Adults With Mental Disorder *Arch Gen Psychiatry*; **60**:709-717.
- Kirkbride JB, Fearon P, Morgan C, et al. (2006) Heterogeneity in incidence rates of schizophrenia and other psychotic syndromes: findings from the 3-center AeSOP study. *Arch Gen Psychiatry*; **63(3)**: 250-8.
- Marwaha, S. & Johnson, S. (2004) Schizophrenia and employment: A review. *Social Psychiatry and Psychiatric Epidemiology*, 39, 337-349.
- Marshall M, Lewis S, Lockwood A, Drake R, Jones P, Croudace T (2005). *Association between duration of untreated psychosis and outcome in cohorts of first episode patients*. *Arch Gen Psychiatry*; **62**: 975–83.

- McCrone P, Dhanasiri S, Patel A *et al* (2008) *Paying the Price: The cost of mental health care in England to 2026*. UK: King's Fund
- McCrone P, Knapp M & Dhanasiri S (2009). *Economic impact of services for first-episode psychosis: a decision model approach*. *Early Intervention in Psychiatry*, **3**, 266-273
- McCrone P, Craig TKJ, Power P, Garety PA (2010). *Cost-effectiveness of an early intervention service for people with psychosis*. *Br J Psychiatry*; **196**: 377–82.
- McGorry, P. D., Nelson, B., Amminger, G. P., Bechdolf, A., Francey, S. M., Berger, G., et al. (2009). Intervention in individuals at ultra high risk for psychosis: a review and future directions. *J Clin Psychiatry*, *70*(9), 1206-1212.
- McGorry, P. D., Yung, A. R., Phillips, L. J., Yuen, H. P., Francey, S., Cosgrave, E. M., 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. *Arch Gen Psychiatry*, *59*(10), 921-928.
- McGorryP (2007) *Investing in youth Mental Health is a best buy (editorial) and The Specialist Youth Mental Health Model: Strengthening the weakest link in the public mental health system In Early Intervention in Youth Mental Health Medical Journal of Australia Supplement*; **187**, 7.
- Melle I, Larsen TK, Haahr U, Friis S, Johannessen JO, Opjordsmoen S, et al (2008) *Prevention of negative symptom pathologies in first-episode schizophrenia*. *Arch Gen Psychiatry*; **65**: 634–40.
- Mihalopoulos C, Harris M, Henry L et al (2009). *Is early intervention in psychosis cost-effective over the long term?* *Schizophrenia Bulletin*, **5**, 909-918
- Morrison, A. P., Bentall, R. P., French, P., Walford, L., Kilcommons, A., Knight, A., et al. (2002). 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. *Br J Psychiatry Suppl*, *43*, s78-84.
- Mueser, K.T., Salyers, M.P., Mueser, P.R.(2001) A prospective analysis of work in schizophrenia. *Schizophrenia Bulletin*. *27*, 281-296.
- NICE. (2009). *Schizophrenia Clinical Guidelines 82 (update): Core interventions in the treatment and management of schizophrenia in primary and secondary care*. London: Department of Health.
- Norman RM and Malla AK (2001) *Duration of untreated psychosis: a critical examination of the concept and its importance*. *Psychological Medicine*, *31*, 381-400.
- Perkins, R., & Rinaldi, M. (2002) Unemployment rates among patients with long-term mental health problems: a decade of rising unemployment. *Psychiatric Bulletin*, *26*, 295-298.
- Petersen L, Jeppesen P, Thorup A et al (2005). *A randomised multicentre trial of integrated versus standard treatment for patients with first episode psychotic illness*. *BMJ*, **331**, 602
- Phillips, L. J., Leicester, S. B., O'Dwyer, L. E., Francey, S. M., Koutsogiannis, J., Abdel-Baki, A., et al. (2002). The PACE Clinic: identification and management of young people at "ultra" high risk of psychosis. *J Psychiatr Pract*, *8*(5), 255-269.
- Rinaldi M, Killackey E, Smith J, Shepherd G, Singh S, Craig T. (2010) First episode psychosis and employment: A review **International Review of Psychiatry** April 2010; *22*(2): 148–162
- Royal College of Psychiatrists *Looking Ahead* Occasional Paper OP 75 London June 2010
- Sainsbury Centre for Mental health (2003). *A Window of Opportunity; a practical guide to developing Early Intervention in Psychosis services*. London: Sainsbury Centre for Mental Health.
- Shiers D, Jones PB & Field S (2009) Early intervention in psychosis: keeping the body in mind. *British Journal of General Practice* **59**. 395–396

- Singh S P, (2009) Transition of care from child to adult mental health services: the great divide. *Current Opinion in Psychiatry*: **22** -386-390.
- Thorup A, Petersen L, Jeppesen P et al (2005). Integrated treatment ameliorates negative symptoms in first episode psychosis- results from the *Danish OPUS trial*. *Schizophrenia Research*, **79**, 95-105
- Woods, S. W., Breier, A., Zipursky, R. B., Perkins, D. O., Addington, J., Miller, T. J., et al. (2003). Randomized trial of olanzapine versus placebo in the symptomatic acute treatment of the schizophrenic prodrome. *Biol Psychiatry*, *54*(4), 453-464.
- Wu, E. Q., Birnbaum, H. G., Shi, L., Ball, D. E., Kessler, R. C., Moulis, M. & Aggarwal, J. (2005) The Economic Burden of Schizophrenia in the United States in 2002. *Journal of Clinical Psychiatry*, *66*, 1122-1129
- Yung, A. R., Phillips, L. J., McGorry, P. D., McFarlane, C. A., Francey, S., Harrigan, S., et al. (1998). Prediction of psychosis. A step towards indicated prevention of schizophrenia. *Br J Psychiatry Suppl*, *172*(33), 14-20.
- Yung AR, Organ BA, Harris MG. (2003) Management of early psychosis in a generic adult mental health service. *Aust N Z J Psychiatry* **37**(4):429-36.
- Yung, A. R., Yuen, H. P., McGorry, P. D., Phillips, L. J., Kelly, D., Dell'Olio, M., et al. (2005). Mapping the onset of psychosis: the Comprehensive Assessment of At-Risk Mental States. *Aust N Z J Psychiatry*, *39*(11-12), 964-971

## Appendix

### Service specification: inputs, models and outcomes

The development of EIP services in the UK has been based on clinical guidelines and service frameworks developed by the IRIS group (IRIS 2000) which were absorbed almost in their entirety into the Department of Health EIP Policy Implementation Guidance (DH 2001, chapter 5). Some key principles include:

- **A youth and user focus** EIP services should be youth-friendly and offer the kind of service that young people would wish to engage with by reflecting youth culture and young people's aspirations concerning the importance of work and autonomy (DH 2007). Interventions are based on a strengths model which supports the young person to practice new skills and to retain autonomy and control; designed to be sensitive to adolescent development issues, the likelihood of abstract thinking, argument and contradiction.
- **Early, proactive and sustained engagement** The service seeks common ground with the individual and avoids premature confrontation of personal explanatory model for psychotic experiences. Engagement, via regular contact with an identified named case manager, based on clients self reported needs, builds on their personal strengths. Engagement takes place in low stigma settings e.g. home, cafes, college. Interventions are delivered flexibly, offering practical assistance focussed on the resolution of identified problems important to the individual. Failure to take prescribed medication, illicit drug use and non attendance do not lead to discharge: instead the service uses an assertive outreach model to avoid clients being lost to services. Where insight is poor, the team will work with and support the family while trying to repeatedly engage the individual.
- **Embracing diagnostic uncertainty** Referral is on the basis of suspicion rather than certainty of psychosis and the service adopts a low threshold for reassessment. The service seeks to avoid premature diagnosis until symptom stability is achieved and adopts a symptom based approach to treatment. Psycho-education is based on risk/vulnerability factors for psychosis and favours the term 'psychosis' rather than specific diagnoses such as Schizophrenia, given the unreliability of diagnosis in an emerging psychosis and to avoid negative stereotypes and low expectations for recovery.
- **Treatment in the least restrictive and stigmatised setting** The service aims to avoid crisis admissions by home treating whenever possible to minimise disruption, stigmatisation and trauma, with systems in place for out of hours cover over evenings and weekends. Where admission is considered necessary to achieve symptom stabilisation, effect medication changes or manage risk (where home treatment and community management is not feasible) admission is ideally to age appropriate, youth friendly, inpatient environments. Interventions are designed to offer choice, preserve autonomy and provide self management strategies and 'tools' for managing psychotic experiences, preventing relapse, promoting recovery and 'ordinary lives'.
- **Emphasis on social roles** Individualised care plans develop individual activity programs designed to enable individuals to sustain & access main stream community educational, vocational, social and leisure pursuits Interventions are informed by evidence based practice models including Individual Placement Support (IPS), client-centred practice, Occupational Therapy and solution-focused approaches
- **Family-orientated approach** Care plans foster a partnership with families in supporting recovery while addressing family (and sibling) support needs. Intervention is appropriate to the early phase of psychosis and the specific needs of any given family and informed by an

understanding of family adaptation to psychosis. Family intervention addresses important issues of burden, uncertainty, stigma, loss, intrusion and desire for independence while preventing the entrenchment of unhelpful patterns of interaction such as criticism, rejection and emotional over-involvement by tackling their precursors notably, feelings of loss, guilt and shame appraisals. The aim of family intervention is to provide hope, optimism and respect for the family in the difficult circumstance they may be facing.

### **Specialist service models**

The majority of UK EIP services are based on an urban stand-alone dedicated EIP service working solely with individuals with FEP and their families: multi-disciplinary include nursing, occupational therapy, social work, psychology and psychiatry. However, delivering EIP services to a rural part of England can present challenges in covering larger geographical areas with dispersed and non-homogenous communities, where there may be restricted public transport limiting access to services, poor local service infrastructure, lack of amenities and social, housing and employment opportunities. This can be further hampered by concerns about stigma, gossip and confidentiality in close knit rural communities so that help-seeking behaviour and early referral are inhibited. This has led to the development of alternative EIP service models tailored to more dispersed populations in preference to a stand-alone urban based EIP service model. Also, some urban areas of England have experienced resource limitations including lack of finance and manpower (recruitment) difficulties, which has necessitated the development and adoption of cheaper alternative EIP service models which include:

- **Augmented generic Community Mental Health Team (CMHT) model** where EIP specialists are based within a CMHT offering additional targeted support to young people with first episode psychosis (FEP) and their families in addition to usual care and case management from the CMHT psychiatrist and multi disciplinary team colleagues
- **Liaison Primary Care model**, where EIP specialists offer a liaison specialist screening and assessment service seeing individuals in primary care, usually a GP practice setting and assist with fast tracking young people with FEP into secondary mental health services as appropriate
- **Youth services model**, where an EIP service sits behind and is fronted through a generic youth service. This service offers a range of information, advice and support to young people including help with housing, sexual health, welfare rights, educational and employment support. If, in the course of contact with a young person an emerging psychosis is identified, youth workers can request specialist assessment and support from EIP specialists who will come in and see the young person with a youth worker within a non stigmatised youth service setting.
- **Hybrid 'hub and spoke' model** where dedicated EIP team workers (spokes) are based within generic CMHT teams but linked to an EIP 'hub' for access to specialist EIP skills, support and supervision. This helps to facilitate links with generic CMHT colleagues, encouraging shared ownership and learning, whilst protecting model fidelity and preventing skills dilution through the maintenance of a specialist 'hub' to which EIP workers are linked.

### **Expected outcomes and performance measures**

From a commissioning perspective there are some consistent expectations which can be built into local arrangements and will help drive service development positively. These could include:

- Fidelity to service specification (eg DH NSF Mental Health Policy Implementation Guide 2001) and evidence base.
- A reduction in the duration of untreated psychosis to a median of three months and a maximum of six months.
- A reduction in the average number of times a person with possible psychosis seeks help to 3 times or less.
- A reduction in the number of people reaching services via an acute pathway
- High levels of service engagement
- The number of young people with possible psychosis being supported in 'watchful waiting'.
- Improved mental health and reduced relapse rates for young people with a first episode psychosis.
- Reduced substance misuse and misuse of alcohol
- Improved housing stability
- Reduced offending behaviour
- Improved physical health
- An increase in the number of young people with psychosis who are in education, training and employment.
- A reduction in the number of young people being admitted to acute psychiatric hospital and reduced lengths of stay.
- A reduction in the number of young people being detained in hospital under the Mental Health Act.
- Improved relationships with families and friends.
- All identified carers to be offered an assessment of need.
- A reduction in the number of suicides
- High levels of satisfaction from service users and carers