

# **REPORT ON THE DETECT SERVICE**



# An Irish Early Intervention for Psychosis Service

# FIVE YEAR PROGRESS, PLANS FOR THE FUTURE







# DEDICATION

### Professor Eadbhard O'Callaghan (1957-2011)

This Report is dedicated to the late Professor Eadbhard O'Callaghan (1957-2011) who spent most of his relatively short but extremely productive professional life researching the causes and consequences of psychosis, using this knowledge to improve treatment options and outcomes.

Eadbhard believed that early recognition and appropriate intervention in psychosis had the potential to make a real difference to the lives of those diagnosed with a psychotic illness.

From 2001 he began a process that lead to the development of Ireland's first early intervention for psychosis service, DELTA. Established in 2005 and based in the Cluain Mhuire Service catchment area, it was seed funded by the Hospitaller Order of St John of God. In 2006, additional funding from the HSE led to the expansion of DELTA to the Elm Mount and Wicklow catchments. The entire service is now known as the DETECT Early Intervention for Psychosis service.

Between 2006 and 2011, Eadbhard was the clinical lead of DETECT and in that time he oversaw the assessment of over 700 referrals and the delivery of specialised phase specific treatment to those newly diagnosed with a psychotic illness. In addition, he supervised and mentored a range of postgraduates engaged in psychosis research.

Sadly, Eadbhard died in early May 2011 following a brief illness. However, the spark of Early Intervention for Psychosis that he ignited has now become a steady flame.

"Start by doing what's necessary, then do what's possible and all of a sudden you are doing the impossible".

# ACKNOWLEDGEMENTS

We wish to acknowledge the hard work and commitment of of those who have worked in both the DELTA and DETECT early intervention for psychosis services since their inception. The educational campaign would not have been possible without the involvement of many partner agencies. The success of this project is underpinned by the close working relationships that we have with referring general practitioners and the multidisciplinary community mental health teams, and we deeply value their ongoing collaborative support. We recognise the contribution of all the members of the DETECT consortium. Without the initial financial support of the Hospitaller Order of St John of God, the Cluain Mhuire management team and the HSE, this service would not be possible.

# **EXECUTIVE SUMMARY**

Schizophrenia and other psychoses, affect over 120,000 people in Ireland with considerable attendant distress to individuals, their families as well as a huge economic cost to the State. As with any illness, prevention is better than cure and while we can do little to prevent psychosis from happening (primary prevention), it is possible to reduce many of the disabilities and costs associated with psychosis (secondary prevention).

Research, both in Ireland and around the world, has shown that many individuals with psychosis experience long delays before receiving effective treatment. However if the illness is recognised and treated at an earlier stage, people will achieve a better level of recovery. This finding has generated a culture of therapeutic optimism amongst those working in this field. The DELTA (Detection, Education and Local Team Assessment) project was Ireland's first early intervention service and was seed funded exclusively by the Hospitaller Order of St John of God. With additional funding from the HSE, DELTA was expanded into the DETECT (Dublin and East Treatment and Early Care Team) service in 2006 and this continues to develop.

An early intervention for psychosis service reduces unnecessary treatment delays by providing community and professional education about psychosis; offering a fast track assessment service and supporting recovery through evidence based interventions. Evaluation of the service to date has shown that delays to treatment have been reduced; in the case of schizophrenia they have been halved from a median delay to treatment of 19 months in 2006 to 9 months in 2011. Approximately a third of the people presenting to the service have been treated successfully in the community without having to resort to inpatient care. This compares favorably to a figure of 16% who had community based, as opposed to hospital treatment between 1995 and 1999. Furthermore, individuals are showing lower levels of the more difficult to treat negative symptoms, when they first present. For most people these gains are maintained, and it is extremely encouraging to see that one year after treatment, 60% have been working, i.e. in paid employment or studying, for more than half of the previous year and over 60% are meeting friends on a weekly basis.

Providing an accessible evidence based quality service that is good value for money, is part of the central core of the DETECT mission. A cost effectiveness evaluation of the service will commence in April 2012, and we hope to expand the range of interventions offered, to ensure that recovery orientated evidence based treatment is provided to those most in need, as we plan towards 2016.

# **KEY POINTS**

- Early treatment of psychosis is associated with improved outcomes.
- Research, both in Ireland and worldwide, has shown that many individuals with psychosis experience long delays, averaging 1-2 years, before receiving effective treatment with resultant poorer outcomes. Reducing this treatment delay is crucial to good treatment outcomes.
- The DELTA (Detection, Education and Local team Assessment) project was Ireland's first early intervention for psychosis service and was funded by the Hospitaller Order of St John of God.
- Through HSE funding, DELTA was expanded into the DETECT (Dublin and East Treatment and Early Care Team) service in 2006, now covering a catchment area of 375,000 people.
- A Vision for Change endorses early intervention for psychosis.
- DETECT reduces unnecessary treatment delays by providing community and professional education about psychosis, a fast track assessment service, and supports recovery through evidence based interventions.
- DETECT provides 3 interventions that supplement standard community mental health services (I) Cognitive behavioural therapy (II) family education and support (III) occupational therapy.
- Evaluation of the DETECT service has shown that delays to treatment can be reduced. As a result the illness presents at an earlier stage and the likelihood of recovery is increased.
- DETECT will conduct a cost effectiveness evaluation of the service commencing in April 2012, funded by the HRB.
- The evaluation of long term (8yr) outcome of those who attended the DETECT service will commence in January 2012, funded by the Hospitaller Order of St John of God Research Grants.
- DETECT proposes to expand the educational campaign to raise public awareness about the signs and symptoms of psychosis and the importance of early intervention.
- In line with international evidence, DETECT plans to increase the range of interventions offered, to ensure that recovery orientated evidence based treatment is provided to those most in need.
- DETECT will be a valuable resource for other services when a national early intervention for psychosis programme is developed.

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## FOREWORD



I am delighted to contribute to this Report. The journey to its publication spans two decades during which time the Order has been researching the needs of people with psychotic conditions. I remember my first time hearing about the delays to effective treatment that had been uncovered by this research and realising that people with psychotic conditions, particularly schizophrenia, required treatment much sooner after the onset of the condition. From this point on the Order worked to assist its mental health services to reduce these delays,

eventually providing the financial support needed to establish the DELTA Project in early 2005. I was delighted when the funding was provided by the HSE to expand the project into the service known as DETECT (Dublin and East Treatment and Early Care Team).

It has been most rewarding to visit DETECT over the years to meet service users and their families, staff and volunteers. I am confident, based on what I have witnessed, that DETECT will continue to deliver a quality service for the next five years and beyond. However it must not lose momentum, its plans for the future are the natural evolution of an early intervention service but need to be tested in the Irish healthcare system to determine their acceptability and impact.

Our ethos and values ensure that we continue to pursue our mission despite the economic climate and provide the type and quality of service required for those in greatest need. 2006 – 2011 have been particularly testing years on many fronts. Operating in such an environment is difficult and not without its challenges; however, as with our founder, Saint John of God, our overriding consideration has to be for those that avail of the services we provide. People affected by psychotic conditions and their families have many needs and life ambitions. Traditionally mental health services have struggled to assist those with these debilitating conditions to achieve a complete recovery. More recently however there is increased hope and optimism amongst the clinicians working in mental health services, many of whom believe in the potential of early intervention. I hope the findings outlined in this Report promotes greater commitment to the early intervention approach and encourages the development of services elsewhere in Ireland.

I would like to pay tribute to all those who have worked, volunteered, and contributed to DETECT's establishment and first five years in action; without their dedication we would not now have the knowledge of the acceptability and potential of early intervention for psychosis in Ireland. Special mention must be made of one man, the late Professor Eadbhard O'Callaghan, without him DETECT would never have been established. His passing this year has been a great loss to us all, most of all to his family. His memory and work lives on through DETECT. I would like to acknowledge the HSE, the DETECT consortium, the Saint John of God Community Services and Cluain Mhuire Management Teams for their contribution over the last five years and look forward to the continued success of the DETECT early intervention for psychosis service.

# MESSAGE FROM MINISTER KATHLEEN LYNCH



Reforming mental health services in Ireland is a priority for Government. We are committed to transforming services in line with "A Vision for Change. Apart from moving away from the old hospital-centered model to community - based, recovery oriented practice, we want our services above all to be patient centred. We want our programmes to reflect an effective quality service which is both appropriate and accessible to those they serve.

Traditionally those with enduring mental health conditions like schizophrenia would not have been expected to recover, I am glad to see that this has changed and we now have reason to be optimistic. It is gratifying to see that individuals who have been treated for significant mental health conditions can recover to live meaningful and fulfilled lives. The level of engagement in work and leisure shown by the research conducted for the DETECT Report provides the evidence that people who develop conditions that feature psychosis can and do recover.

The Programme for Government makes a number of commitments in relation to mental health, including the ring-fencing of a sum of €35 million annually from within the health budget, to develop community mental health teams to ensure early access to specialised services for adults and children. I am delighted to see that rapid access is central to the early intervention for psychosis model and that the DETECT Report provides evidence that a fast track response is both feasible and effective. Early intervention makes so much sense, yet with the stigma attached to mental illnesses people are reluctant to seek help until quite late. We need to change our attitudes and our thinking about mental health. We need to create an environment that recognises and treats people with mental health problems in a similar way to other health needs. If we improve mental health literacy and learn to speak openly about mental health, we will change attitudes, encourage help seeking and create a society that is supportive of some of its potentially most vulnerable and marginalised citizens. I would like to commend the efforts made over the last five years to improve public understanding of psychosis but also acknowledge that further mental health education and promotion is needed.

As Minister with responsibility for people with mental health needs, I have had the opportunity to visit many services and programmes since taking up office. On meeting members of the DETECT team earlier this year I was struck by the strength of their commitment to the early intervention approach. Having now read about the impact of the service I can understand their conviction. My priority over the term of this Government is to further advance the implementation of A Vision for Change and I would regard early intervention to be a central core of mental health services of the future.

I would like to congratulate the Hospitaller Order of St. John of God, the Community Mental Health Services of Cluain Mhuire, Elm Mount and Wicklow, the HSE, and the DETECT team for producing this Report and creating a quality service underpinned by a sustained positive partnership.

Minister of State, Department of Health and Department of Justice, Equality & Defense with responsibility for Disability, Older People, Equality & Mental Health.

# INTRODUCTION

Schizophrenia and other psychoses, affect over 120,000 people in Ireland, and are a source of enormous distress and economic burden to individuals, families, and their communities as well as a huge cost to the State. Psychosis is characterised by a loss of contact with reality, leading to changes in how things are perceived and a difficulty in organising one's thoughts and behaviour. This can lead to high levels of anxiety and personal distress. Schizophrenia is the most common psychotic condition, accounting for approximately 60% of all cases of psychosis; however mood disorders (both mania and depression) and illicit substance misuse may also be associated with the development of psychosis.

Psychosis usually develops in late adolescence/early adult life. The condition often starts gradually and symptoms, particularly in the early stages can be difficult to detect without careful and painstaking use of reliable and valid assessment tools and where possible the additional inputs from families who may report subtle but evolving concerns about changes in function. The outcome of psychosis is variable, and with current treatments, about one third of individuals make a complete recovery. Unfortunately many of the factors such as gender and family history that predict recovery are fixed or non modifiable.

Studies in Ireland and around the world have shown that there is typically a delay of one to two years between the onset of symptoms and the receipt of effective treatment. This allows time for the condition to become more severe, for crucial social and vocational networks to become fractured, and for disabilities to develop. This delay, known as the duration of untreated psychosis (DUP), is often associated with suicidal thoughts and acts as the individual grapples with an altered mental state. A long DUP is a risk factor for a poor recovery. However, unlike other fixed risk factors, it is possible to reduce DUP and thereby improve the outcome of psychosis.

Central to the rationale for early intervention for psychosis, is the premise that by reducing the period of untreated psychosis, and delivering evidence based phase specific treatment, the outcome of the condition will be improved. Over 200 early intervention for psychosis centres have been developed worldwide, with the Australian service [EPPIC], based in Melbourne widely considered the prototype or pioneering service. Evaluation of the EPPIC service indicates higher recovery rates and a more cost effective service compared to a traditional mental health service delivery model (Harris et al., 2005, Mihalopoulos et al., 2009). Similar results have been demonstrated in other countries that have developed their own early intervention in psychosis services (Malla et al., 2003; Garety et al., 2006; Melle et al., 2008).

DETECT (Dublin and East Treatment and Early Care Team), is a novel initiative in mental health care in Ireland, funded by the HSE and the Hospitaller Order of St John of God. Phase I commenced in 2005 with the DELTA project, which was seed funded by the Hospitaller Order of St John of God for 5 years. With additional funding from the HSE, the project was expanded into the DETECT service on the 14th February 2006.

DETECT is an adjunctive service to the three community mental health services in the South Dublin and Wicklow areas and serves a population of 375,000. Based on the International Early Intervention for Psychosis Clinical Guidelines, DETECT aims to reduce the unnecessary delays that people experience in receiving effective care and provide treatment that is tailored for the early phase of a psychotic condition. This model has been shown to improve and accelerate recovery in comparison to standard care. The early intervention model consists of three basic components; a psychosis education campaign, a rapid assessment service, and specialised evidence based recovery orientated interventions (O'Callaghan et al, 2010).

The interventions offered to all people diagnosed with a first episode psychosis consist of cognitive behavioral therapy, occupational therapy, and family/carer education. A joint treatment model operates, where DETECT provides specific components of the individual's treatment for the first year after presentation in partnership with their Community Mental Health team. The model as depicted in Figure 1 is relatively novel and has attracted interest from within and beyond Ireland. This Report outlines the DETECT 5 year service evaluation. This, in addition to DETECT's scientific research and emerging findings in the field of early intervention have informed the future strategic plan for the DETECT service, outlined in the latter section of this Report.

### Figure 1. Model of Early Intervention



# VISION, MISSION, AND VALUES

The **VISION** of the DETECT Service is that effective treatment will be delivered by qualified staff in a non stigmatized environment to people who develop psychosis at the earliest possible opportunity.

The **MISSION** of the DETECT Service is to establish an effective Irish model of early intervention for psychosis and assist with the national development of an early intervention for psychosis programme.

The VALUES of the DETECT service are hospitality, justice, compassion, excellence and respect.

### 

# **SECTION 1**

# EDUCATION CAMPAIGN TO REDUCE DELAYS TO EFFECTIVE TREATMENT

Over the last 5 years DETECT has run an awareness campaign about psychosis targeting the public, allied mental health professionals and general practitioners (GPs). Although the extent of this work is limited by funding, a number of innovative projects aimed at increasing public awareness about psychosis have been completed. A timeline of the major educational events each year is presented in Table 1.

2005/2006	2007	2008	2009	2010
The book "Understanding Mental Health" was launched and goes on sale to the public. A copy was sent to all schools by the HSE	The website www.detect.ie was launched	A Golf Classic was organised in Wicklow to raise awareness and raise funds for the education campaign	Article entitled "Early Detection is the key to dealing with mental health issues" was published in the Irish Times	A mail shot of a psychosis leaflet was delivered to 125,000 households <sup>2</sup>
The website www.deltaproject.ie was launched	A storyline in Fair City about psychosis ran for 5 months <sup>1</sup>	DETECT took part in a public meeting regarding mental health in Wicklow	DETECT podcast was uploaded onto YouTube	DETECT joined as a partner with the See Change Campaign and was involved in ten public forums

### Table 1: Major Public Awareness Events on Psychosis completed by DETECT 2005-2010

<sup>1</sup> Assisted by the Mental Health Commission

<sup>2</sup> Assisted by Mental Health Ireland and NOSP

### Allied Community Professional Workshops

One of the key aspects of the education campaign are the information workshops provided to those who are in contact with young people in the community, e.g. teachers, university health staff, counsellors, Gardai, sports leaders, youth voluntary groups, practice nurses, and helpline staff. Figure 2 shows that in excess of 900 professionals have attended workshops over the last five years. The effectiveness of workshops is evaluated through questionnaires. Results indicate that considerable knowledge is gained through attendance, leading to increased confidence in ability to detect the early signs of psychosis and a better understanding of the pathway to appropriate services.



Figure 2: Attendances of Allied Community Professionals at DETECT Workshops

### Medical Professional Workshops

The interface with Primary Care is critical to early detection. A survey of Irish GPs in 2003, found that GPs identified education about psychosis, rapid assessment, psychological therapies for their patients, and better communication from the mental health services as priorities for their patients with psychosis (Gavin et al 2006). During the service planning phase, the DETECT team worked closely with the Irish College of General Practitioners (ICGP) and General Practitioners (GPs) in the South Dublin and Wicklow catchment area to incorporate these recommendations into its service model.

DETECT in collaboration with the ICGP, devised an educational programme consisting of workshops as part of the GP Continuous Medical Education (CME) programme, postal information, and the publication of Early Psychosis Guidelines for Primary Care.The number of medical professionals who have participated in the psychosis workshop has grown significantly up to 2010 (Figure 3). At this stage over 600 professionals have attended, many of whom practice in the DETECT catchment area. A DETECT survey of GP satisfaction conducted in 2007, found that 80% of the 126 respondents found the service very/extremely useful, and that the combination of CME session and literature received via the post, was more useful than postal information alone. Analysis of the completed questionnaires showed that those who had attended a CME psychosis workshop were significantly more likely to refer suspected cases of psychosis, and were more likely to find the DETECT service useful (Renwick et al, 2008).



### Figure 3. Medical Professional Attendees at DETECT Psychosis Workshops

# **SECTION 2**

# FAST TRACK ASSESSMENT SERVICE

### Number of Referrals

DETECT received 795 referrals between 14 February 2006 and 13 February 2011. All referrals were interviewed using the Structured Clinical Interview for DSM diagnoses. This is regarded as the gold standard for making a psychiatric diagnosis (Williams et al, 1992; Segal et al, 1994). Of the 795 referrals, 347 met criteria for a psychotic condition. As can be seen from Figure 4 below, referrals have increased over time but the total number of cases has remained consistent over the 5 year period.







### Breakdown of Diagnoses

Of those who were not diagnosed with a psychotic illness, 28% did not meet criteria for any mental illness, 25% satisfied criteria for a mood disorder and a further 18% were diagnosed with an anxiety disorder (O'Donoghue et al, in press).

Of the 347 people who were diagnosed with a psychotic illness, 41% met criteria for schizophrenia, 12% met criteria for a bipolar disorder with psychotic features, 12% had a depressive episode with psychotic symptoms, and 10% had a substance induced psychosis. The remaining 25% met criteria for one of the rarer psychotic conditions such as delusional disorder, brief psychotic episode and psychosis due to a general medical condition. Figure 5 provides a short breakdown of the characteristics of each diagnostic group, with the global assessment of functioning scores (GAF) indicating levels of functioning in all groups, (range 0 to 100).

### Figure 5. The Characteristics of each Diagnostic Group

Schizophrenia	Bipolar Disorder	Depression with psychosis	Substance Induced psychosis	Other Psychoses
58% Male	55% Male	57% Male	69% Male	57% Male
42% Female	45% Female	43% Female	31% Female	43% Female
Mean age: 32	Mean age: 31	Mean age: 39	Mean age: 28	Mean age: 34
GAF Score*: 34	GAF Score*: 36	GAF Score*: 39	GAF Score*: 40	GAF Score*: 47

\* Mean Global Assessment of Functioning Score, range 0-100.

### **Response Time**

The DETECT consortium set a target of making contact with all people referred within 72 hours, as it was considered vital to be able to respond rapidly to the referrals received. Over the last four years DETECT has kept record of the date of referral and date of contact. As can be seen in Figure 6 it has been successful in meeting this target and in 2010 made contact with over 50% of referrals within 24 hours.

# Response Time 60% 40% 20% 0% 20% 2006 2007 2008 2009 2010• more than 72 hrs 48 - 72 hrs 24-48 hrs 1 less than 24 hrs

### Figure 6. Response Time to the Referrals Received

# **SECTION 3**

# TREATMENT

The 'critical period' of treatment refers to the first three years after the onset of the condition. It is thought that during the time, the course and outcome of the disorder is determined, and treatment is likely to be most effective (Birchwood et al, 1998). Research has shown that comprehensive specialised services for people with psychosis during the critical period is superior to standard care (Petersen et al, 2005) however evidence is emerging that it may need to be provided for longer than three years (Bertelsen et al, 2008). At present, DETECT is not in a position to offer adjunctive treatment beyond one year and the extent of the specialised interventions available is limited by the resources available. The DETECT consortium decided to use the limited funding provided to ensure that all people who met criteria for a psychotic condition received group based cognitive behavioural therapy and occupational therapy, and that their families were offered a specific psychosis carer education programme.

### Cognitive Behavioural Therapy

Cognitive Behavioural Therapy (CBT) is a form of psychotherapy that is widely used for the treatment of depression, anxiety, and many other clinical disorders. Recently CBT has been shown to be an effective treatment for psychosis (Alvarez-Jimenez et al, 2011). The aim of CBT for psychosis is to help the individual make sense of their experiences and reduce associated stress in order to minimize the negative impact of symptoms on cognitive and social functioning. A group CBT for psychosis programme has been available in DETECT since the service started. Table 2 presents the 12 modules of the programme. One module is covered each week in a 90 minute session. The programme is completed in 12 weeks. Over the last 5 years 13 programmes have been run. Two hundred and seventy-nine people were offered a place on a programme, of which 146 (52%) accepted. Each person attends an average of nine sessions.

Modules 1 – 4	<ul> <li>Baseline assessment, programme outline and objectives</li> <li>Physiological and behavioural aspects of anxiety</li> <li>Cognitions</li> </ul>
Modules 5 – 9	<ul> <li>CBT model of psychosis</li> <li>Introduction to meta-cognitive training</li> <li>Acceptance and change / Substance Misuse</li> <li>Social support and social anxiety</li> </ul>
Modules 10 - 12	<ul> <li>Self-esteem and goal setting</li> <li>Medication and assertiveness</li> <li>Review assessments, relapse prevention – early warning signs</li> <li>Presentation by participants of their care programme</li> </ul>

### Table 2: DETECT Cognitive Behavioural Therapy Programme for First Episode Psychosis

### **Occupational Therapy**

Work and occupation is essential for health and wellbeing (Waddell and Burton, 2006). Unfortunately people with psychosis often experience occupational deprivation (Krupa et al, 2010) which can be alleviated by occupational therapy (Cook et al, 2009). The DETECT Occupational Therapy (OT) service commenced in October 2007. This service enables people with psychosis to regain their occupational identity which they have often lost as a result of experiencing a psychotic episode. The OT service is primarily provided at the DETECT offices, however home treatment is also available. Intervention is largely individual psychosocial sessions. The occupational therapist assists the person in setting and achieving personally meaningful goals within the areas of productivity, social and leisure skills, self-care, and community living skills. A key component of the service is facilitating a return to a productive role. This usually involves linking in with various community agencies. In total 148 individuals have been offered the OT service of which 88 (59%) accepted. The average number of OT sessions attended per person was 12.

There was an average improvement of 24 points between OT recipients initial and discharge score on a 100 point scale that measures occupational participation. Twenty four (27%) participants disengaged from the OT intervention before treatment was complete. Table 3 presents a broad outline of clients' progression plans at discharge. It is notable that 60% progressed onto formal education/training or paid employment.

Outcome: engaging in		Number (%)	
	Self and Home Care	5 (10%)	
	Personal Development	11 (22%)	
	Voluntary Work/Parenting	4 (8%)	
	Formal Education or Training	16 (32%)	
	Paid Employment	14 (28%)	

### Table 3: Progression of Clients on Discharge from Occupational Therapy

### **Carer Education Programme**

Research has shown that people who suffer from a psychotic condition have better outcomes in the medium and long term if they have family support (Pitschel-Walz et al, 2001). The purpose of the family information and support course is to provide a better understanding of the condition and the treatments available.

The family education programme is based on a collaborative philosophy, where it is acknowledged that individual, family, and professional each have their particular experience and expertise to contribute, and that bringing these perspectives together is likely to produce the best outcome. This programme is regularly updated through ongoing consultation with participants and has led to changes in both content and format. In 2007 a pre-course individual family meeting commenced, when it became clear that this would address a desire for early contact and information. In 2010 a choice of attending either an evening or weekend programme was introduced, to facilitate and maximise attendance. This consultative process has seen improved attendance and a downward trend in course drop out, from 31% to 8% over the last five years. In five years a total of 298 participants representing 166 families have attended the family education programme. Table 4 lists the topics covered in each session and some comments from participants.

### Table 4: DETECT Carer Education and Support Programme for First Episode Psychosis

Session 1: What is psychosis?	Session 4: The psychotic experience
Session 2: A medical perspective	Session 5: Issues for families
Session 3: Psychological approaches	Session 6: Relapse prevention

"The notes given each week helped to review and reinforce the learning".

"Before attending the course I knew only a small amount about psychosis. I now have a good grasp of it and the notes regularly help me to remember how to keep on helping my son".

"The motivational approach to encouraging someone to accept help worked with my son".

# **SECTION 4**

# SERVICE EVALUATION

DETECT has attempted to establish a service that meets as many as possible of the recommendations of best practice in the treatment of psychosis and schizophrenia provided by the National Institute of Clincial Excellence (NICE) and the Schizophrenia Patient Outcome Research Team (PORT). Due to funding constraints, DETECT is not in a position to provide all the recommended interventions, however Table 5 demonstrates that it meets the majority of the recommendations of the NICE section on initiating treatment for first episode psychosis (National Institute for Health and Clinical Excellence, 2011). The importance of the service evaluation of DETECT was highlighted by Vision for Change (2006) on page 99 were it states

"A pilot EIS project in South Dublin and Wicklow is currently underway and may provide a stronger evidence base and a specific protocol for the implementation of early intervention teams in an Irish urban context."

DETECT is now in a position to outline a number of significant findings that have emerged during the course of its review. These include reductions in delays to effective treatment, the impact of reduced delays on symptom severity, the percentage of people with a first episode of psychosis that can be effectively treated in the community and the impact of the service on the one year outcome of patients.

### Table 5: DETECT Compared to NICE Recommendations on Initiating Treatment for Psychosis

NICE Recommendation	DETECT Practice
Urgently refer all people first presenting with psychotic symptoms in primary care to a local community-based secondary mental health service (early intervention services, crisis resolution and home treatment team, or community mental health team). Choose the appropriate team based on the stage and severity of illness and the local context.	DETECT encourages primary care to refer people presenting with psychotic symptoms to the service as a matter of urgency and has provided training to clinicians on how to assess for psychotic symptoms.
Carry out a full assessment in secondary care, including assessment by a psychiatrist. Write a care plan with the service user as soon as possible. Send a copy to the referring primary healthcare professional and the service user.	DETECT performs a standardized comprehensive assessment using gold standard instruments such as the Structured Clinical Interview for DSM, the Wisconsin Quality of Life Scale and the Insight scale. The results of the assessment are sent to the referring primary healthcare professional and the community mental health team.
Include a crisis plan in the care plan, based on a full risk assessment. Define the roles of primary and secondary care in the crisis plan and include the key clinical contacts in case of emergency or impending crisis.	DETECT does not currently devise the care plan. This is the responsibility of the community mental health team.
Offer early intervention services to all people with a first episode or first presentation of psychosis irrespective of age or duration of untreated psychosis. Refer from primary or secondary care. Early intervention services should aim to provide the full range of interventions recommended in this guideline for people with psychosis.	DETECT provides the full range of evidence based interventions, apart from art therapy. In addition occupational therapy is provided on an individual basis.
If it is necessary for a GP to start antipsychotic medication they should have experience in treating and managing schizophrenia.	DETECT has published guidelines for early psychosis management for General Practitioners in Ireland and has distributed them to all GPs in the catchment area.
Initiation of antipsychotics.	DETECT is not responsible for initiation of antipsychotic medication but has distributed a best practice algorithm to the services to guide prescribing practice.

### Reducing delays to effective treatment

One of the primary aims of DETECT is to reduce delays to effective treatment. As can be seen in Figure 7, median delays to effective treatment have significantly shortened for those with schizophrenia from 19 months when the service commenced, to 3 months in 2007/2008; we believe this was a result of the intensity of the education campaign at this time. Notably delays have crept up back again in the last 2 years to a current median of 9 months, however this is still a 50% reduction compared to the first year of service. We believe this highlights the importance of an adequately funded sustained educational programme that is innovative in its approach. Norwegian research in this area has shown that in the absence of continuous education, delays do rise and can eventually return to pre education intervention levels (Joa et al, 2008).

Due to the low annual number of the rarer psychotic conditions it is not yet possible to accurately determine the impact of the education campaign on the delays to effective treatment for these conditions.





### Symptom Profile of Cases over the last 5 years

International research has shown that there is a relationship between delays and severity of psychotic symptoms (Marshall et al, 2005). Psychotic symptoms are categorised as either positive or negative. Positive symptoms reflect the additional elements to the person's reality such as hallucinations. Negative symptoms reflect a loss in ability to express emotion, lack of motivation, and social withdrawal. A landmark study in Norway found that a reduction in delays to effective treatment was associated with a reduction in the severity of positive and negative psychotic symptoms (Melle et al, 2004). As depicted in Figure 8 DETECT did not find a significant reduction in positive symptoms but has found that there is a significant reduction in negative symptoms. These symptoms are regarded as the most difficult to treat and are often resistant to pharmacological treatment, therefore preventing them from developing and becoming ingrained is critical.





### Treatment as an outpatient

One the ambitions of early intervention for psychosis services is to provide treatment in the least restrictive and disruptive environment for the person and their family. The data from the participants in a first episode of psychosis study carried out in 1995 -1999 showed that only 16% were treated in the community (Clarke et al, 2006). From a comparable DETECT subsample, 45% were treated in the community in 2008 (Figure 9). Over the five years an average of 37% received treatment for their first presentation exclusively in the community. This is an increase of 30% on the average of 16% found between 1995 and 1999. This finding indicates that strategies of early detection and intervention complement the developments in community services that ensure that people with first episode psychosis are treated, in as far as is possible, in their own home. This is beneficial for them, their families, and the health services.



### Figure 9. Percentage Treated as an Outpatient at First Presentation

### One year outcome study

With ethical approval, DETECT has been approaching all previous users of the DETECT service to invite them to participate in a study of one year outcome. This has been both qualitative and quantitative, measuring levels of symptoms, functioning and recovery. To date, 240 people have been approached, of whom 133 agreed to participate.

When we compared those who consented to be reassessed and those with did not, we found no significant differences in the baseline profile of the two groups with regard to age, functioning, delays to effective treatment, positive symptoms, negative symptoms, depressive symptoms, insight, or quality of life. There was also no difference between the groups in the proportion of males and females or in proportion of people with or without schizophrenia.

The analysis of the changes in scores between baseline and 1 year follow-up of those who consented to be reassessed, established that there were significant changes in a positive direction in functioning score (Figure 10), positive symptom severity (Figure 11), negative symptom severity (Figure 12), and level of depression (Figure 13). These were most pronounced amongst those who had a DUP of 6 months or less. There were no significant changes in the baseline and 1 year quality of life domain scores amongst the followed up sample as a whole, however those with a DUP of 6 months or less made significant improvements in two quality of life domains: physical wellbeing and environmental satisfaction.

In addition to repeating the baseline assessments, the one year outcome assessment included a widely used objective measure of recovery called the Strauss Carpenter Levels of Functioning Scale. There are nine items on the instrument which are rated by the trained clinician after the one year reassessment meeting. Two items are related to employment, two are related to relationships, two are related to mental health, one is related to self care and two are general questions. With regard to mental health we determined that only 28% of 101 people reassessed, who had been provided with services through DETECT and the local community mental health service during the follow up period, were admitted to in-patient care following their initial treatment. Furthermore from the Strauss Carpenter scale 82% had no or only minor symptoms in the month prior to assessment. Nearly two thirds (64%) needed no help to meet their own basic needs and a further 18% were deemed to require only a small amount of help. Figures 14 presents the employment outcome of the users of the DETECT service who have been reassessed and Figure 15 presents their social outcome. It is extremely encouraging that 60% have been working, i.e. in paid employment or studying, for more than half of the last year and over 60% are meeting friends weekly.



Figure 10. Change in Functioning\* between First Presentation and 1-year follow-up Assessment

Figure 11. Change in Positive Symptoms\* between First Presentation and 1-year follow-up Assessment





### Figure 12. Change in Negative Symptoms\* between First Presentation and 1-year follow-up Assessment

Figure 13. Change in Depressive Symptoms\* between First Presentation and 1-year follow-up Assessment



\* Lower Scores Better



Figure 14. Work life in the Follow up period of Individuals who have attended the DETECT Services

Figure 15: Social life of Individuals who have attended the DETECT Services



# **SECTION 5**
# PLANS FOR THE FUTURE

Over the last five years, with the support of the HSE and the Hospitaller Order of St. John of God, DETECT has successfully piloted Ireland's first early intervention for psychosis service. Our results indicate that the theoretical benefits of early intervention can be realised within the Irish healthcare system. Furthermore there is evidence to support expansion of these services nationally. DETECT will continue to evaluate its service and grow to meet the needs of the population served. With a view to this, a strategic plan has been developed. This should provide answers to a number of important questions regarding the future direction an Irish early intervention for psychosis service should take.

## Tackling Delays to Effective Treatment

### Public Education Campaign – the PEPPER Project

DETECT proposes to conduct a virtually identical (culturally adapted) programme to a successful Norwegian initiative. The campaign entitled PEPPER (Public Education Programme about Psychosis in the Eastern Region) is circumspect, discreet and will provide measurable outcomes; public knowledge, reduction in stigma, and duration in length of delays. This will only be possible through additional funding in the region of €150,000.

### **Clinical Services**

### At Risk Mental State Clinic

A number of well established early intervention services around the world have been conducting trials on primary prevention strategies. These strategies include psychological, pharmacological and complementary medicine approaches butvary from service to service. Primary prevention requires the identification of people in the prodromal period of a psychotic illness, also known as "at risk mental state". One tool developed for this purpose is the Structured Clinical Interview for Prodromal Syndromes (SIPS) developed by Miller and colleagues in Yale. Having completed the training a number of the DETECT clinicians are certified to administer the SIPS. Although a number of people (n = 43) in the prodromal phase have been identified by DETECT in the last 5 years, a formal clinic for community mental health teams to refer such people to, has not yet been set up. A goal for the future is to establish such a clinic to allow community mental health teams to refer those who they suspect are experiencing prodromal symptoms and are at risk of developing psychosis.

### Supported Employment

A review of the research on the different approaches to assist people to return to work following treatment for schizophrenia conducted by Crowther and colleagues (2001) concluded that supported employment was the most effective model to assist those people attain and retain paid employment. Since this review results of further randomized control trials have been published indicating that the model can be successfully introduced outside of the US and is effective with first episode psychosis populations (Bond et al, 2008). The model with the strongest evidence base for use with people with mental health conditions is the Individual Placement and Support model (IPS, Burns et al, 2007). IPS is currently available in the DETECT service through a research grant provided by the Mental Health Commission. If the results of this research show that IPS improves employment outcome funding will be required to sustain the availability of the intervention.

#### Key working and assertive outreach

The DETECT service proposes to introduce a key worker system for the first year of service receipt. This is a necessary step in order to develop a model of assertive outreach to the entire DETECT Integrated Service Area. The purpose of this would be to increase engagement levels with the interventions from 50% to 80%. This will only be possible with the provision of 2 extra fulltime posts.

### Evaluation

#### **Economic evaluation**

According to McCrone and colleagues (2010) early intervention provides better outcomes and costs less than traditional service delivery. As yet DETECT has not completed a scientific cost benefit analysis. This will be addressed through a HRB funded study of the cost effectiveness of DETECT which is due to commence in 2012.

### 8-Year Outcome Study

Despite the development of over 200 early intervention services worldwide, more medium term outcome studies are needed. The objective of a DETECT 8-year outcome study is to establish the health and social outcomes of those who attended the service between 2005 and 2009 (n = 335). This will allow a number of research questions to be tested. Firstly we will establish if the outcomes of those who attended the DETECT service is superior to the outcomes of a historical first episode psychosis group (n = 171) carried out in the 1990s, the latter were followed up after four and eight years of using traditional mental health services. We will also be able to test which of the components of the DETECT service influences 8 year health and social outcome. Finally we will establish the relationship between shortened duration of untreated psychosis and outcome. The results will inform policy makers, key stakeholders and ultimately the future provision of mental health care for psychosis. Funding for the first year of this study has been awarded through the St John of God Research Grants Scheme and further finance to continue this work will be sought from research funding bodies.

## National Context

### National Early Intervention Services

DETECT will assist as far as is practicable with the national roll out of early intervention and act as a resource to other services. This will be dependent on funding and the provision of posts. It will facilitate the development of an Early Intervention Network, were other services to commit to their own model of early intervention.

# **SECTION 6**

# AWARDS AND PUBLICATIONS

## Awards

In 2008 DETECT won Best Public Healthcare Initiative at the Irish Healthcare Awards. Additionally clinicians attached to the service have been awarded grants from the Mental Health Commission and the Health Research Board.

## Publications

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Clarke, M. First episode studies and the path to early intervention, 2011, 21st St John of God Annual Research Day, Dublin.

Clarke, M. Outcome and early intervention in Ireland, 2011, AfaR International Conference, Venice, Italy.

Hill, M. 12 Year Outcome of first-episode psychosis and its relationship to DUP, 2010 Winter Meeting College of Psychiatry in Ireland, Belfast.

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# **APPENDIX 1: DETECT TEAM**

Consultant Psychiatrist	1 x 0.5 Post
Project Manager	1 x Full Time Post
Administration Officer	1 x 0.5 Post
Clinical Nurse Specialist	1 x Full Time Post and 1 x 0.5 Post
Occupational Therapist	1 x Full Time Post
Social Worker	1 x 0.5 Post
Psychologist	1 x 0.5 Post
Clinical Fellows	3 x Full Time Posts

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