Universidade Nova de Lisboa
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Reinvigorating and Redesigning Early Intervention in Psychosis Services for Young People in Auckland

Master’s Dissertation in International Mental Health

Policy And Services

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Acronyms

ADHB	Auckland District Health Board
DUP	Duration of Untreated Psychosis
DHB	District Health Board
EASY	Early Assessment Service for Young People with Psychosis
EI	Early Intervention
EIT	Early Intervention Teams
EPIP	Early Psychosis Intervention Programme
EPPIC	Early Psychosis Prevention and Intervention Centre
FEPP	First-Episode and Early Psychosis Program
FTE	Full Time Equivalent
IQR	Inter Quartile Range
KPI’s	Key Performance Indicators
NHS	National Health Service
NICE	National Institute for Health and Care Excellence
PACE	Personal Assessment and Crisis Evaluation (clinic)
PIG	Policy Implementation Guide

Executive Summary

Auckland has been pioneering in the adoption of Early Intervention in Psychosis models but the design of the service has not changed in 19 years. In service utilisation data from 997 patients seen from 1996 -2012, patients had a median number of 89 contacts (IQR: 36-184), with a median duration of 62 hours of contact (IQR: 24-136). Patients spent a median number of 338 days (IQR: 93-757) in contact with the program. 517 patients (52%) did not require admission to hospital, and those who did spent a median of 124 days in hospital (IQR: 40-380). Asian patients had a 50% increased chance of being admitted to hospital.

This report includes 15 recommendations to guide reforms to the service, including outlining the importance of vision and key components. It recommends strengthened managerial leadership and a more integrated team structure with dedicated resources for improved community awareness, education and early detection as well as the capacity to take direct referrals. Key Performance Indicators (KPIs) should be established but At Risk Mental States should be excluded. Auckland should maintain the current target age range. The duration of service should be increased to a minimum of three years, with the option to extend this to five years. The ratio of care co-ordinator to patients should be capped at 1:15 whilst non-clinical supporting staff should be increased. Psychiatrists should have a caseload of about 80 per FTE. A local Service Delivery framework should be developed, as should cultural interventions to meet the needs of the multicultural population of Auckland. Research capacity should be incorporated into the fabric of Early Intervention in Psychosis Services.

Any changes should involve consultation with all stakeholders, and the DHB should commit to investing time, human and political resources to support and facilitate meaningful system change to best serve the Auckland community.

Sumário executivo

Auckland tem sido pioneira na implementação de modelos de Intervenção Precoce em Psicose. No entanto, esta organização do serviço não mudou nos últimos 19 anos. Segundo os dados obtidos da utilização do serviço, no período de 1996 -2012 foram atendidos 997 doentes, que tinham um número médio de 89 contactos (IQR: 36-184), com uma duração média de 62 horas de contactos (IQR: 24-136). Estes doentes passaram um número médio de 338 dias (IQR: 93-757) em contacto com o programa. 517 doentes (52%) não necessitaram de internamento no hospital, e os que foram internados, ficaram uma mediana de 124 dias no hospital (IQR: 40-380). Os doentes asiáticos tiveram um aumento de 50% de probabilidade de serem internados no hospital.

Este relatório inclui 15 recomendações para orientar as reformas para o serviço e, nomeadamente, delinear a importância de uma visão organizacional e dos seus componentes-chave. As recomendações incluem o reforço da gestão e da liderança numa estrutura de equipe mais integrada, com recursos dedicados a melhorar a consciencialização da comunidade, a educação e deteção precoce, bem como a capacidade de receber referenciações diretas. Os Indicadores Chave de Desempenho devem ser estabelecidos, mas os Exames de Estado Mental em risco, devem ser removidos. Auckland deve manter a faixa etária alvo atual. A duração do serviço deve ser aumentada para um mínimo de três anos, com a opção de aumentá-la para cinco anos. A proporção de gestor de cuidados para os doentes deve ser preconizada em 1:15, enquanto o pessoal de apoio não-clínico deve ser aumentado. Os psiquiatras devem ter uma carga de trabalho de cerca de 80 doentes por equivalente de tempo completo. Um serviço local de prestação de cuidados deve ser desenvolvido com, nomeadamente, intervenções culturais para responder às necessidades da população multicultural de Auckland. A capacidade de investigação deve ser incorporada no Serviço de Intervenção Precoce em Psicoses.

Qualquer alteração deverá envolver contacto com todas as partes interessadas, e a Administração Regional de Saúde deve comprometer-se em tempo, recursos humanos e políticos para apoiar e facilitar a mudança do sistema, investindo de forma significativa para melhor servir a comunidade Auckland.

Resumén ejecutivo

Auckland ha sido pionera en la adopcion de los modelos de intervencion temprana en psicosis, sin embargo la estructura de el servicio no ha cambiado de ninguna manera en los ultimos 19 años. Segun los datos de utilizacion del servicio, 997 patients lo atendieron desde el 1996 hasta el 2012, con un numero medio de 89 contactos (IQR: 36-184), y una duracion media de 62 horas de contacto (IQR: 93-757). 517 pacientes (52%) no necesitaron de hospitalizacion, y los que fueron admitidos en el hospital, pasaron alli una mediana de 124 dias (IQR: 40-380). Los datos muestran que los pacientes de origen asiatico tienen el 50% mas de posibilidades de ser hospitalizados.

Este informe encluye 15 recomendaciones para guiar possibles reformas en el servicio.

El siguente informe recomenda el reforzamiento de la manager leadership y una estructura de equipo mas integrada con los recursos desponible, para mejorar el conocimiento de la comunidad sobre ese tema, su educacion y su capacidad de identificar esta condicion prontamente, asi como de referirla a los servicios. Indicadores llave de actuacion deberian ser estabelecidos pero los examenes de estado mentale en riesgo deberian ser excluidos. Auckland deberia mantener el actual target de etad. La duracion del servicio deberia ser aumentada a un minimo de tres anos, con la opcion de extender este periodo a cinco años. El ratio entre co-ordinator de cuidados y pacientes deberia ser mantenido a 1:15, mientras el numero de profesionales de apoyo non-clinico deberia ser aumentado. Los psiquiatras deberian tener un numero maximo de casos de circa 80 pacientes por FTE. Un servicio local de prestacion de attencion deberia ser desarollado, asi como interventos culturales para satisfacer las necesitades de la populacion multicultural de Auckland. La capacidad de la investigacion deberia ser encorporada en la tela de los servicios de intervencion temprana en psicosis. Cada

cambio deberia incluir consultationes con todos los interesados. Además el DHB deberia comprometerse en usar tiempo y recursos politicos y humanos para suportar y facilitar este proceso de cambio, para ofrecer un mejor servicio a la comunidad de Auckland.

1. Background and context

1.1 Mental illness and Psychotic Disorders in New Zealand

One in six New Zealand adults are diagnosed with a common mental disorder at some point in their life (1). Mental disorders, as a group, are the third leading cause of disability in the country (11.1% of all health loss) after cancer (17.5%) and cardiovascular disease (17%) (2). Ten per cent of the health budget is currently spent on mental health. New Zealand currently spends 9.7% of its GDP on health, with a per capita annual expenditure of $1906 (3).

Psychotic disorders, such as schizophrenia, represent the third most common group of mental disorders after affective disorders and addictions, yet the severity of the conditions and the associated disability result in a high proportion of the mental health budget being spent on the conditions. Schizophrenia is estimated to affect around 0.4% of the population of New Zealand. However, there is thought to be significant variation amongst the population. For example, Maori are thought to have a prevalence rate of closer to 1%, even adjusting for variations in age and socio-economic factors in that population (4).

It is difficult to obtain current national data on bed utilisation by diagnosis. In 1992, schizophrenia was the fourth most common cause of a first admission to a mental health unit (11.5 per hundred thousand age standardised), and the most common cause of a readmission (92 per hundred thousand age standardised readmission rate) (5). In an Auckland study looking at data from the year 2000, people with schizophrenia represented 38% of psychiatric in-patient admissions, with other psychotic disorders representing a further 9% (6). In 2012, the average length of stay on the in-patient mental health unit in Auckland was 30 days at NZ$1200 per day. Expenditure on medications for psychotic disorders is estimated at US$1,138,192 per 100,000 population, per year. The total psychotherapeutic medicine spend is US$1,773,406 per 100,000 population per year(3) .

Psychotic disorders such as schizophrenia in New Zealand have their onset in late adolescence and early adulthood (7), with peak ages of onset is 20-24 in men and 25-29 in women (8). The age distribution has a significant impact on societal costs beyond the health budget. Young people with schizophrenia will often require social security payments in the form of unemployment or disability support in addition to accommodation supplements for sheltered or supported housing for many decades. There are also significant opportunity costs where these young people do not fulfil the societal and employment trajectories that would be expected of them. Globally, schizophrenia now represents the third leading cause of disability amongst young people (9).

1.2 The History of Early Psychosis Services

The initial impetus for the development of Early Intervention Services came from academic studies into first episode presentations of psychosis in the 1980s that found a delay in treatment, or extended Duration of Untreated Psychosis, was associated with a significantly poorer outcome (10, 11).

In 1984, a ten-bed clinical research unit for first episode psychosis was established at the Royal Park Hospital in Melbourne, Australia. They aimed to raise expectations of positive outcomes by separating patients presenting for the first time from chronic patients with poor prognoses and reduced the traumatic impact of hospitalization and institutionalisation. In addition, the service aimed to utilise low dose medications and develop psychosocial interventions that were appropriate for the stage of illness and the developmental stage of the young patients (12) . By 1992, this was expanded to include community care and re-branded as EPPIC (Early Psychosis Prevention and Intervention Centre). A mobile early detection team was established and patients were followed up for two years following their first episode. In 1993, a clinic was set-up for people with sub-threshold or prodromal psychosis, the Personal Assessment and Crisis Evaluation (PACE) clinic.

In the United Kingdom, Early Intervention Services were established initially in North Birmingham and at the Institute of Psychiatry in London in the 1990s. In 2001, the Department of Health included the development of Early Intervention Services in the National Health Service (NHS) Plan. This included a Policy Implementation Guide (13) that set out the funding and recommended service configuration for the establishment of approximately 50 Early Intervention Services across England with the explicit aim of reducing Duration of Untreated Psychosis and providing an assertive model of care.

At about the same time in Stavanger, Norway, services were also developed with the explicit aim of reducing the Duration of Untreated Psychosis (14). This involved widespread public education about psychotic disorders and the development of active, rapidly responding teams for the assessment of young people suspected of the condition. The *Tidlig Intervensjon ved Funkssjonell Psychose* or *TIPS Study* demonstrated that these interventions could reduce the time to assessment and were associated with improved outcomes. Early Intervention Services were also established at Yale in the United States, in Canada and in Switzerland. By 1997, the first International Early Psychosis conference was held in the United Kingdom with active exchange of information between many of these international sites.

1.3 The Development of Services in the Auckland Region

Figure 1. Satellite Image of Auckland

Clinicians in New Zealand were encouraged and inspired by these developments. In the 1980s and 1990s, mental health services in New Zealand were being quite radically transformed. Psychiatric institutions which had been established in the 19th century had fallen into disrepute and were being closed down in favour of community based mental health services and psychiatric units that were integrated within general hospitals. The last psychiatric hospital was closed in 1996. The establishment of geographically based community mental health teams covering four different areas of the central city had preceded this. Each team was comprised of a number of psychiatrists working within a multidisciplinary team that included psychiatric nurses, occupational therapists, clinical psychologists and social workers. These teams worked closely with local General Practitioners and frequently saw patients in their homes.

Over subsequent years, the services were expanded. In spite of substantial increases in the population of central Auckland, the number of inpatient beds was not increased, and instead, a greater number of services were provided in the community. Crisis Teams, Home-Based Treatment Teams, and Assertive Outreach Teams were established to increase the capability of mental health services to manage increasingly complex and severe presentations in the community. Auckland District Health Board also invested in the development of the non-governmental sector. Consumer advisers, peer support workers (expert patients) and employment specialists were integrated into this community system. A number of respite facilities were also created. These are small residential units with between four to six beds that provided emergency or crisis admissions for periods up to five days in cases where people did not require the intensive input of hospitalisation, or where families needed the period of support.

Early Intervention Teams (EIT) were integrated into these Community Mental Health Centres. Each of the Centres was allocated between three and four Full-Time Equivalent (FTE) clinical staff dedicated to patients with first presentations of psychotic illness. Heavily influenced by the developments in Melbourne, these teams adopted many of the principles from the EPPIC service and attended training in Australia. However, over the years, the four teams diverged in entry criteria and approach but in 2012, there was agreement to align the entry criteria and philosophy of the four teams within Auckland, but this was not a substantial change from 1996.

There is currently one EIT for young people under the age of 18 and four teams for adults aged 18 to 30. Each adult team covers a population of approximately 100,000 to 250,000 people. They focus on patients presenting in the early phases of psychosis and do not see people with a Duration of Untreated Psychosis in excess of two years. Patient to clinician ratios are between 1:10 and 1:15, where young people in those services receive intensive input for up to two years. The entry criteria for services encompass all psychotic presentations, including affective psychoses but excluding borderline personality disorders. The model of care in Auckland is for multidisciplinary, multifaceted, pragmatic interventions with the aim of optimising functioning and encouraging reintegration into mainstream society. A patient will expect to receive a package of psychological interventions (Cognitive Behavioural Therapy for psychosis), social support and vocational rehabilitation. There is also a strong emphasis on the use of low-dose antipsychotics to reduce side effects.

The Early Intervention teams are expected to utilise the wider community and hospital-based services when required. There are no separate youth friendly inpatient units for patients over the age of 16. There is one four bedded youth focused community respite unit. The Early Intervention Teams rely on Crisis Teams to provide emergency psychiatric care out of normal working hours.

1.4 Drivers for change

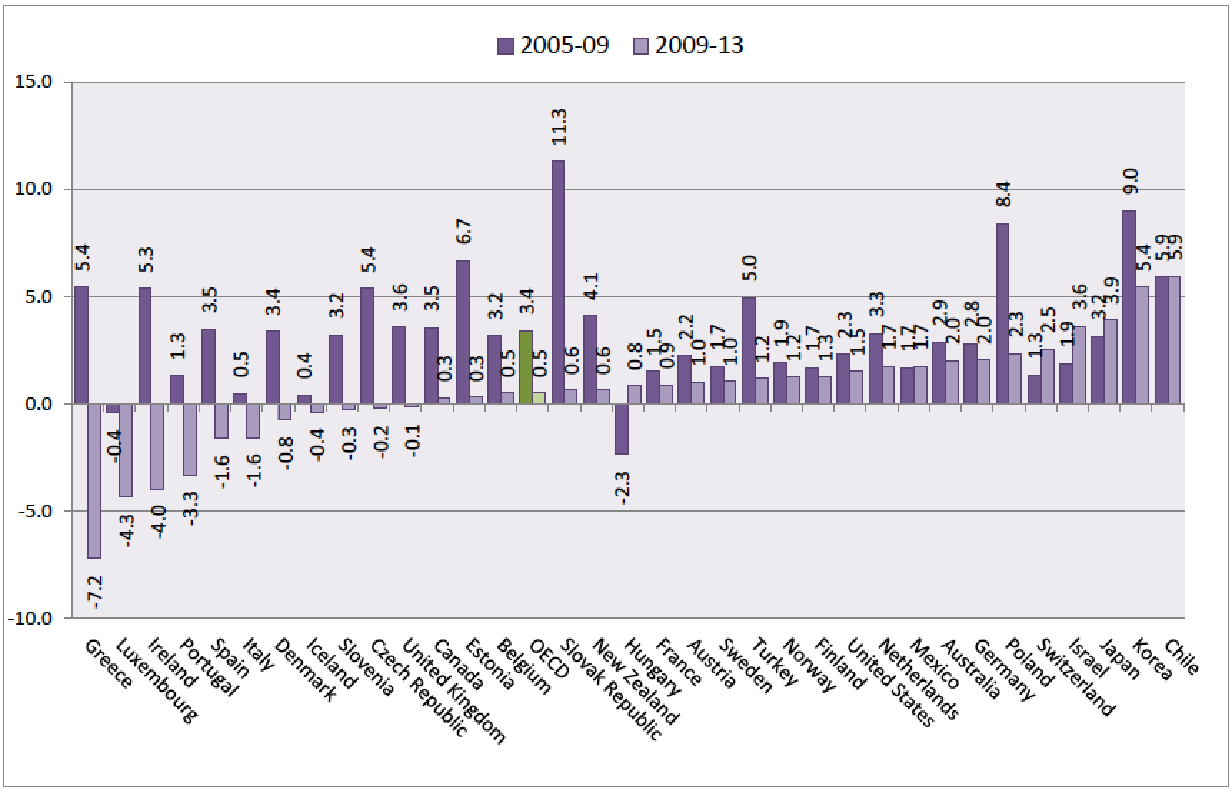

Figure 2. Average annual growth in per capita health spending in real terms 2005 – 2013 (OECD Health Statistics)

Mental health services, along with the wider public health services, have been under substantial pressure since the global financial crisis of 2008. Although New Zealand has weathered the storm better than many countries, the crisis resulted in the government reining in public sector expenditure. There has been no growth in per capita health expenditure in real terms over the period (Figure 2), and mental health has not performed well when competing for funding against other sectors such as surgery and paediatrics.

Demographic changes resulting from increased life expectancy and a relative decrease in the working population over the next two decades has resulted in a policy *focus on long-term conditions and care for the elderly* at the Ministry of Health. However, the government has outlined its vision for mental health services over the coming five years in a document called, "*Rising to the Challenge*" (15), which is based on a policy document, “*Blueprint 2”* (16), which outlines the principles for mental health reform. It sets out its priority areas as the mental health of infants and children, and improving early access to care for common mental disorders, particularly depression, although it does mention early psychosis services as an important area.

These policy changes have signalled an expectation of reform to the existing community mental health structures. Historically, these community teams have focused on the 3% of the population with the most severe mental disorders, particularly schizophrenia, bipolar disorder and severe depression. This was the population that was decanted from the large psychiatric institutions into community care. However, the largest contribution to disability measures (such as DALYs) in the New Zealand population is mild-to-moderate depression, due to its high prevalence in the population. This group is currently not seen in community mental health services and is largely managed primary care. The documents attribute some of our poor outcomes, such as poor suicide rates, due to the difficulties the population faces in accessing appropriate mental health services in a timely fashion, and the failure to integrate primary and secondary services in mental health.

Mental health services have also been strongly criticised by service user and family advocacy groups. In spite of the significant changes following de-institutionalisation, mental health services are often still seen as coercive and poorly responsive to patient choice and individual autonomy. Some have dubbed them "institutions in the community" which have been poorly integrated into the wider health and social care system (17). Patients with mental health conditions have been found to have poor physical health and shortened life expectancy. In particular, people with schizophrenia in New Zealand die 20 years earlier than the average (18).

The scientific conceptualisation of schizophrenia and related psychotic disorders has also changed significantly in recent years. The Kreaplinian concept of *dementia precox*, where schizophrenia is a disorder of continuously deteriorating function and bleak outcome is being challenged, as is the idea of it being a unitary disorder with a single aetiology. Instead, it is increasingly being conceptualised as a collection of multiple disorders with probably varying aetiologies, with a wide range of functional outcomes(19). Studies into populations at increased risk of psychosis, including those with attenuated psychotic symptoms, show a relatively low risk of developing psychotic disorders (10 to 30%)(20). Some have even questioned the utility of using the diagnostic term "schizophrenia" at all(21).

The Early Intervention Teams themselves have also faced a number of structural challenges in terms of sustainability and consistency. The small teams embedded within community mental health services have been prone to periods of dysfunction. The biggest challenge has been sustaining a model of care in a team comprising three or four people. Periods of high staff turnover or prolonged leave have significantly impacted on the ability of the teams to deliver a comprehensive service consistent with the ethos of Early Intervention. Structurally, they been positioned behind the interface of the community teams with primary care in the community, and have struggled to promote easy access for the assessment of young people suspected of having psychosis. They have also had limited opportunities to interface with other services for young people, particularly outside the health sector. Workforce development and the development of services have also been constrained by the small size of these teams. Other services have invested in emerging technologies (such as online resources, apps and messaging services), which has not been possible in Early Intervention due to the lack of economies of scale. It has also hampered the ability of the individual clinicians to build more specialised skills in areas, as they have needed to prioritise general skills, in effect becoming "*Jacks of all trades but masters of none*".

These *political, financial, social*, *scientific and structural* challenges are driving calls for reform and renewal of Early Intervention Services for young people with psychosis in Auckland and New Zealand after two decades in existence. However, there has been no National framework for the provision of Early Intervention services in New Zealand with the government devolving policy to individual District Health Boards with the expectation that they would provide services that will meet the specific needs of their local populations.

1.5 Current Evidence for Early Intervention Services

The importance of early detection and prompt assessment:

The rollout of early intervention in psychosis services has been accompanied by a significant amount of research around the effectiveness of the model. The initial findings from the 1980s that suggested a poor outcome in those with an extended Duration of Untreated Psychosis have been replicated in many settings. Furthermore, it has been shown that the differences in outcomes are sustained for many years, even after individuals receive good-quality treatment for psychosis. The Norwegian TIPs study in the 1990s specifically looked at whether different service configurations that promoted quicker access to services for young people presenting with psychosis impacted on outcomes. This study compared an early detection region with a control region. Patients in the early detection group entered the treatment program with a shorter Duration of

Untreated Psychosis, less severe clinical symptoms and with decreased suicidality. Improvements were also sustained over two years where these patients were shown to have persistently lower negative symptoms and a trend towards better functional and social outcomes.

In the UK, studies looked at pathways to care for young people with early psychosis with a specific aim of better understanding the causes of delays in treatment. They looked at the respective contributions of the delay in seeking help, the delay in referral to mental health services and the delays in treatment within mental health services to the total duration of untreated psychosis. Worryingly, they found that the greatest contributor to the Duration Untreated Psychosis was the delay of treatment within mental health services, followed by a delay in seeking help (22).

The importance of dedicated and specialised early intervention teams:

There have now been a number of large randomised controlled trials looking at the effectiveness of early intervention models versus generic models, most notably the LEO trial in the UK (23) and the OPUS trial in Denmark (24). These studies suggested that people under specialised early intervention services experience better clinical, social and vocational outcomes. They also utilise fewer inpatient bed days. Other studies have suggested that an early intervention approach reduces the risk of a second relapse, and that these services are popular with both young people and their families (25, 26)

Cost effectiveness:

The low caseloads and assertive outreach model of Early Intervention Teams are associated with higher initial costs than conventional community mental health teams. However, a number of studies have analysed the cost effectiveness of these interventions. In the UK, it was estimated that Early Intervention saved the National Health Service around £5700 in the first year of a patient's engagement, increasing by a further £2300 in years two and three (27). Much of the savings are driven by the reduced admission rates and shorter inpatient beds stays (28). An Australian study looking at young people treated in Early Psychosis Services and comparing them to match controls from generic services found that the Early Psychosis Service patients displayed lower levels of positive symptoms eight years after treatment, were more likely to be in remission and had a more favourable course of illness than the controls. 56% of the Early Intervention patients were in paid employment compared to 33% of controls, and on average they cost A$3445 per annum to treat compared to A$9503 per annum in the control group (29). Similarly, analysis of the OPUS intervention in Denmark was also found to be cost effective (30).

The Duration of an Early Intervention Programme and the longer-term sustainability of improvements:

The more intensive inputs provided in the early phases of a psychotic episode were expected to change the trajectory of the illness and improve outcomes over the longer term. In Denmark, The OPUS trial found that the improvements in symptoms, treatment adherence and outcomes seen in the first two years whilst under Early Intervention Teams were not sustained following discharge. At five years and ten years follow-up, there were no longer significant differences between the Early Intervention group and the control group who experienced standard care (31). Similarly, a study in Hong Kong suggested that Early Intervention models of service had to be extended to sustain the gains in outcome. (32)

2. Audit of Early Intervention in Psychosis Service Utilization in Auckland District Health Board

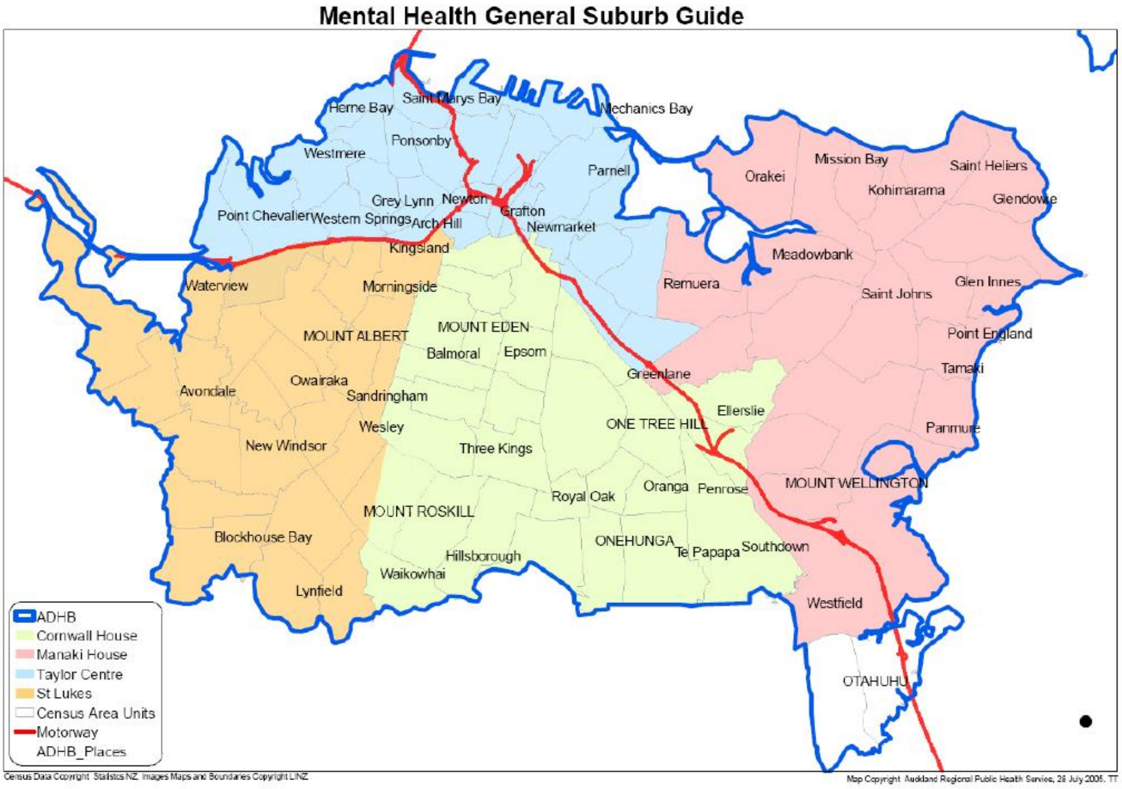

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Figure 3. A map of ADHB region with coverage of Community Mental Health Centres

Auckland District Health Board (ADHB) mental health services have implemented an electronic Patient Management System (PMS) called HCC (*Intrahealth New Zealand Ltd*) which incorporates electronic clinical notes. The system is also used to inform management decisions and track the activity of individual clinicians and teams.

2.1 Aim

The aim of the audit was to examine the demographic characteristics and service utilisation of patients within the Early Intervention Teams in ADHB from 1996 to 2012 using data extracted from HCC.

2.2 Methods

Data for all patients seen by Early Intervention Teams was extracted from HCC for the period from 1st January 1996 to 31st December 2012. Patients over the age of 30 were excluded to maintain consistency of criteria across the period. Data was then cleaned and analysed using SPSS (*ver 20. IBM*).

2.3 Results

The search yielded a total of 997 patients. The total number of patients entering Early Intervention Services per year is shown in Figure 4 below. Initially the teams were seeing relatively small numbers but from 1998 this increased to between 30 and 60 new cases a year, with substantial variability between years. Cases were unequally distributed across the four geographically-based Community Mental Health Centre Early Intervention Teams – St. Luke’s Centre (34%), Taylor Centre (29%), Manaaki House (22%) and Cornwall House (15%).

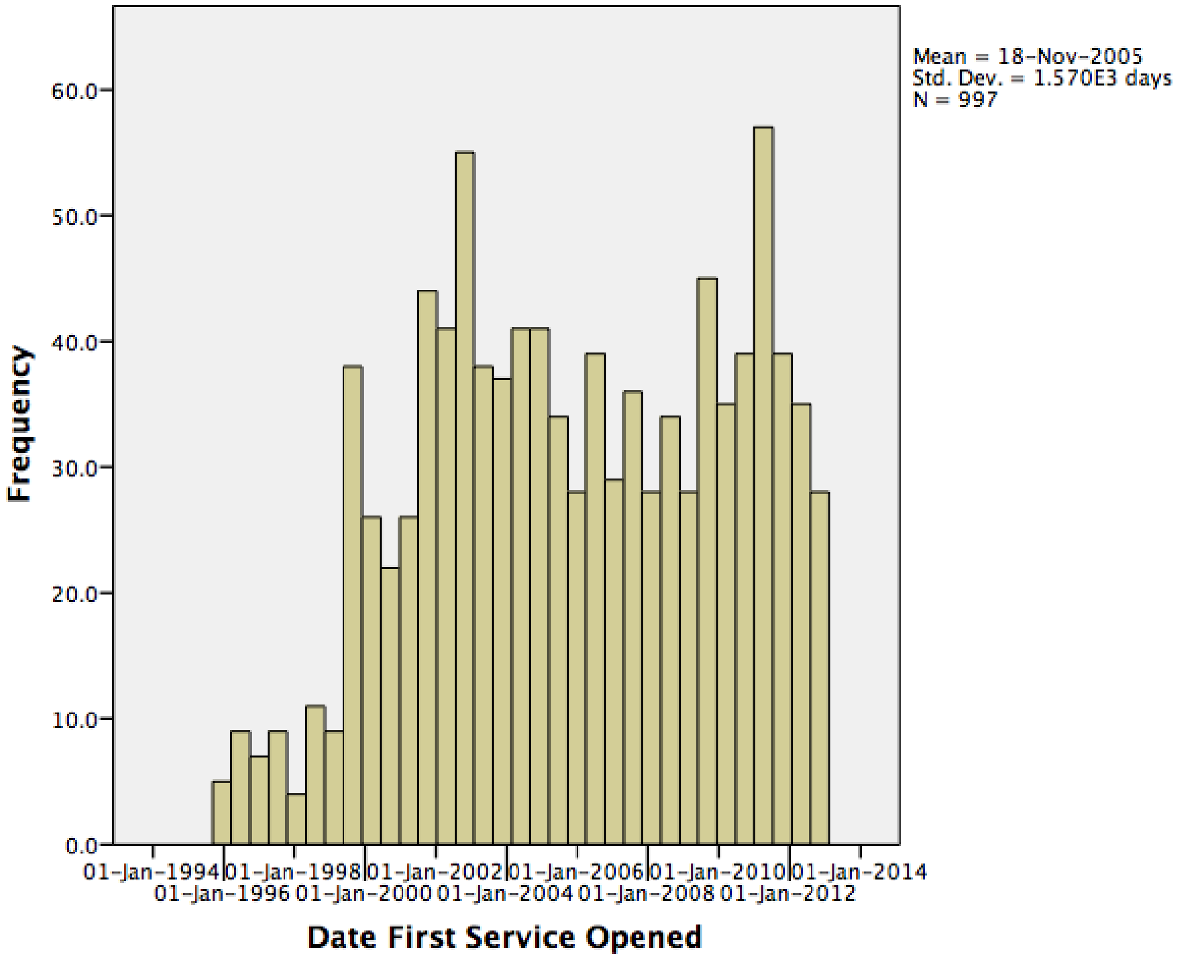

Figure 4. Number of patients admitted to Early Intervention Services by year

2.4 Characteristics of patients at Entry to Service:

The demographics of the patient group is summarised in Table 1. 65% of the patients were male. Just under half of the patients (46%) were New Zealand European. Maori patients (17%) were the next largest ethnic group, followed by an equal proportion of Pacific Islander and Asian patients (15%). Two thirds of the patients are male.

		Per cent	*n*
Gender			
	Male	66%	654
	Female	34%	343
Ethnicity			
	NZ European	46%	459
	Maori	17%	172
	Pacific Islander	15%	151
	Asian	15%	149
	Other	5%	49
	No ethnic affiliation	2%	17
Age			
	<=19	24%	236
	20-21	22%	222
	22-23	18%	180
	24-26	19%	187
	27+	17%	172

Table 1. Demographics of Patients on Admission to Early Intervention Services

The men age at entry was 23 (SD 3.5) and is illustrated in Figure 5 below, with the age distribution skewed towards the younger end. Almost a third were still living at home with family when they first presented (Table 2), and people from areas of socio-economic deprivation, as measured by *neighbourhood decile NZ Depravation Band (33)* are over-represented in the service.

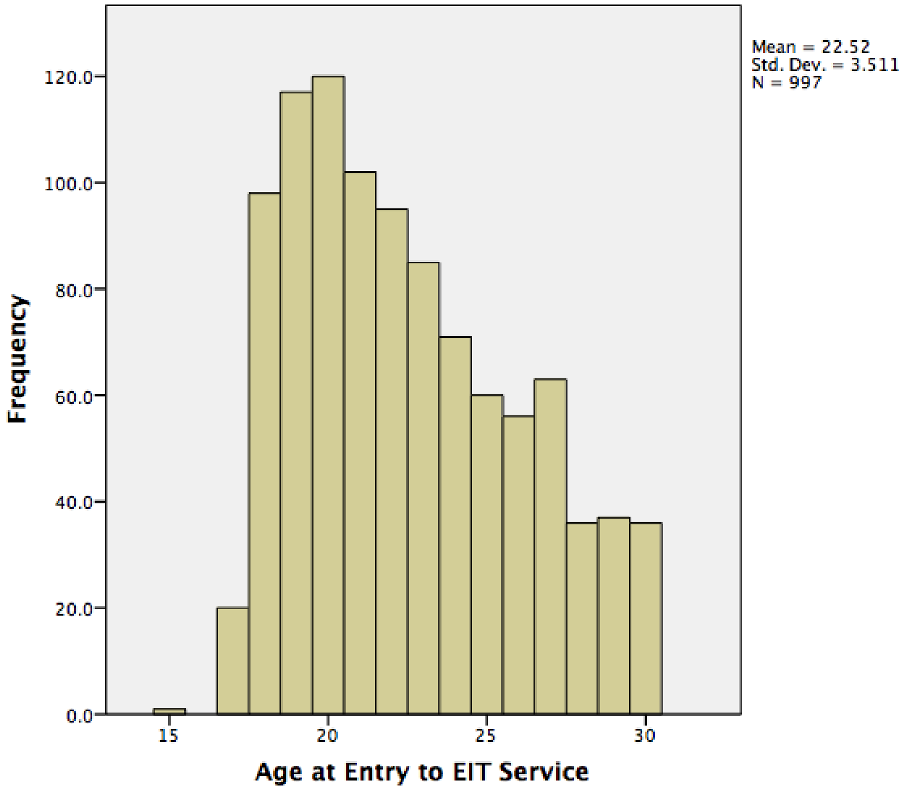

Figure 5. Age Distribution on Entry to Early Intervention Service

	Percentage	*n*
Independent With Others	*18.8*	187
Dependant With Others	*27.5*	274
Independent Alone	*6.6*	66
Residential Care	*2.1*	21
Boarding House/Communal	*3.2*	32
Inpatient	*0.1*	1
No Fixed Address	*0.5*	5
Other	*5.4*	54
Not recorded	*35.8*	357

Table 2. Living arrangements on entry to service

Decile	**Per cent**	***n***
1	5.2	*52*
2	5.7	*57*
3	5.4	*54*
4	11.7	*117*
5	10.9	*109*
6	16.8	*167*
7	4.2	*42*
8	10.1	*101*
9	11.8	*118*
10	17.3	*172*
Total	99.2	*989*
Missing	0.8	*8*
Total	100	*997*

Table 3. Social Deprivation Index: Larger Values Represent Greater Deprivation

2.5 Service Utilisation:

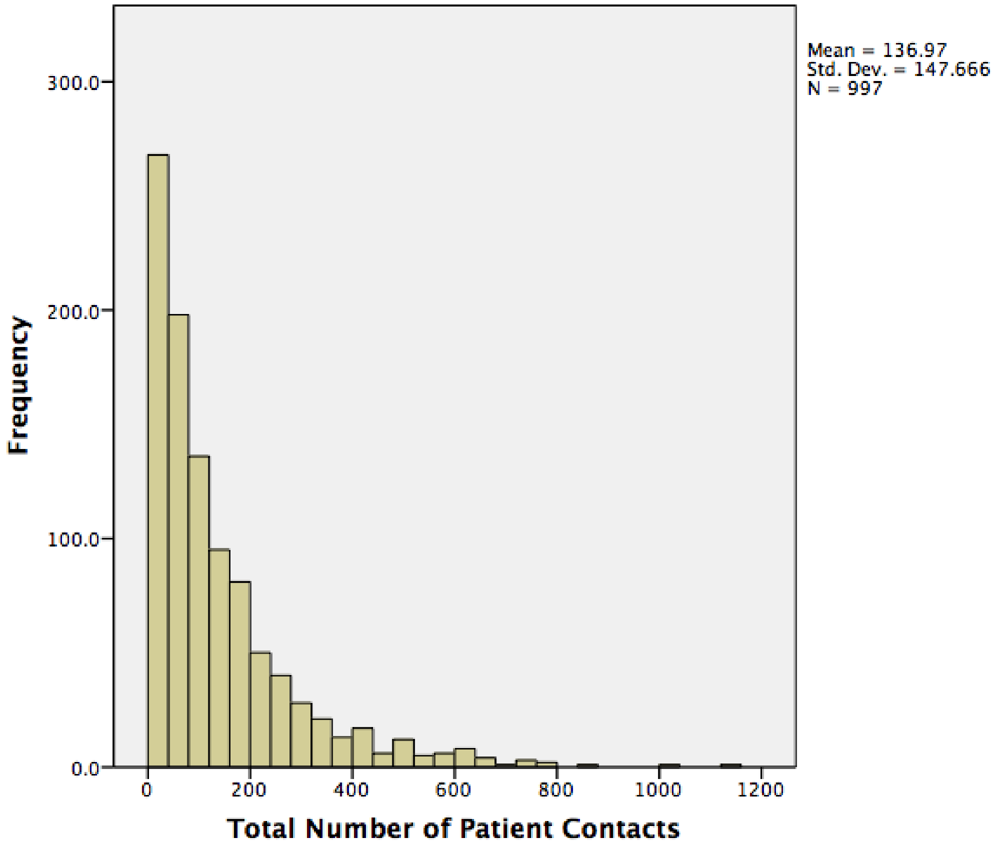

Figure 6. Number of Contacts with Early Intervention services

The 997 patients had a median number of 89 contacts (IQR: 36-184) with Early Intervention clinicians (Figure 4), with a median duration of 62 hours of contact (IQR: 24-136). Patients spent a median number of 338 days (IQR: 93-757), or just under one year in Early Interventions Services, significantly below the target two years recommended provision of service. 517 patients (52%) did not require admission to hospital, and those who did spent a median of 124 days in hospital (IQR: 40-380)

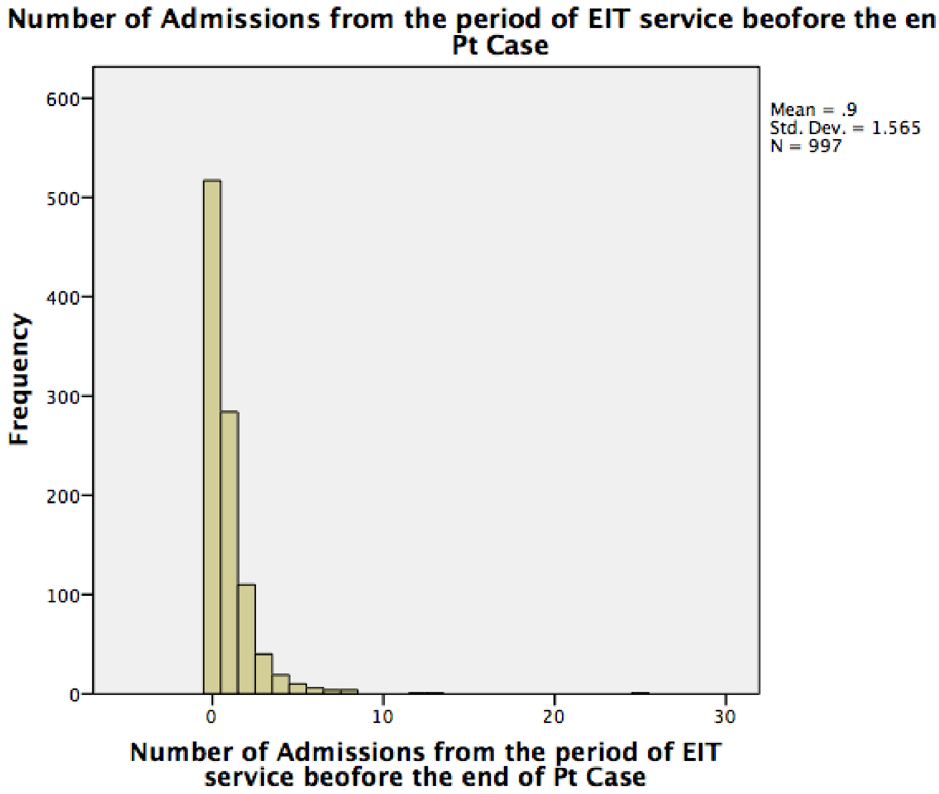

Figure 7. Number of Admissions to Hospital while with Early Intervention Services

Table 4 below summarizes the odds of an admission to hospital whilst under the care of the Early Intervention Services. There are no differences between genders, or any differences between age groups. Asian patients have a 50% increased risk of an admission whilst under the care of services, with no statistically significant differences seen between any other groups.

		n	**Odds Ratio**	**95% CI**	***p***	**Odds Ratio**	**95% CI**	***p***
			Univariate Analysis			*Multivariate Analysis*		
Gender								
	Male	*643*	1			1		
	Female	*337*	1.2	0.9-1.5	*0.19*	1.2	0.9-1.6	*0.14*
Ethnicity								
	NZ European	*459*	1			1		
	Maori	*172*	1.2	0.8-1.7	*0.38*	1	0.8-1.6	*0.60*
	Pacific Islander	*151*	1.3	0.9-1.9	*0.11*	1.3	1.0-2.1	*0.11*
	Asian	*149*	1.5	1.0-2.2	*0.03*	1.5	1.0-2.1	*0.04**
	Other	*49*	0.8	0.4-1.4	*0.37*	0.8	0.4-1.4	*0.37*
Age								
	19 or under	*233*	1			1		
	20-21	*221*	0.8	0.5-1.1	*0.19*	0.8	0.5-1.1	*0.18*
	22-23	*176*	0.8	0.5-1.2	*0.30*	0.8	0.5-1.2	*0.28*
	24-26	*182*	0.7	0.5-1.1	*0.13*	0.7	0.5-1.0	*0.13*
	Over 27	*168*	0.8	0.5-1.1	*0.20*	0.7	0.5-1.1	*0.15*

Table 4. Univariate and Multivariate (age, sex & ethnicity) Odds of Being Admitted to Hospital whilst in Early Intervention Services (*=p<0.05)

2.6 Discussion

The audit data is consistent with what we would expect in the service for young people with psychosis in Auckland. The patient population is young with a peak in the early 20s, which is explained by the earlier peak in the incidence of psychosis in men. It also explains the higher ratio of men, as we would expect the age distribution for women to be pushed to the right as it peaks in their late 20s.

Ethnic minorities, particularly Maori, are overrepresented when compared to their overall population numbers. However, the Maori, Pacific and Asian populations are younger than the European population in Auckland. Our Maori and Pacific populations are also subject to greater socio-economic deprivation, a risk for psychotic disorders.

The service utilisation data is also informative, particularly the length of time people receive service. Some of this can be explained by the nature of supporting young people with psychotic disorders. As assertive as services are, ultimately patients and their families have a choice as to whether they engage with clinical services following an episode. Many people also experience a significant amount of denial and are reluctant to consider the possibility that they may have a relapse after their first episode. In ADHB, 7 to 10% of current patients are subject to compulsory treatment, and therefore Early Intervention Services have to work hard to engage and maintain relationships.

Nevertheless, the median length of time the patient remained in the Early Intervention services was around one year, with about a quarter of patients being discharged at three months. This is consistent with results from Early Intervention Services in Christchurch (34) and is sub-optimal number of reasons. Clinically, much of the work in Early Psychosis teams now focuses on minimising the impact of the second episode. Teams help patients and their families recognise the signs of relapse, and develop strategies which allow them to access help a timely manner and minimise the adverse impact on their social functioning. Secondly, the current recommendations for antipsychotic use following a first episode is for patients to remain on these medications for at least a year. There is reasonable evidence that the early discontinuation of antipsychotic medication significantly increases the risk of relapse and is associated with poorer outcomes(35). This data would suggest that half of the patients are not receiving this support from Early Intervention teams. Patients with shorter episodes of care may also be disadvantaged in not receiving before employment and vocational rehabilitation work that is central to long-term improvement in outcomes.

The 50% increase in the risk of Asian patients under Early Intervention Services being admitted to hospital is also of interest. Firstly, this represents a diverse range of communities, with New Zealanders of Chinese, Indian, Filipino and Korean ethnic backgrounds all falling under this category. The growth in the Asian population has been relatively recent. As a result the cultural specific services and cultural competence of the workforce are often less developed when compared to other groups. The more recent nature of the immigration may also suggest that families affected by a young person with psychosis may not have the social supports, particularly the support of friends and extended family, which more established groups have access to. Lastly, it is possible that this could be a result of the high numbers of students, particularly foreign students, who live in central Auckland and attend the three local universities and other educational institutions. These students often live in student accommodation with no local family, and cannot be supported by assertive community treatment and are therefore more likely to be admitted to hospital.

It is also important to note some of the limitations and challenges related to the data available for analysis and available to management. HCC is an electronic notes system that has to meet diverse needs. It is the primary repository for all clinical notes and prescriptions. It is utilised by managers within clinical teams to monitor the performance of individuals. For example, it allows a supervisor to see how frequently an individual clinician see patients (number of contacts) and for how long (duration of contacts). However, this system does not appear to be optimised to monitor the overall performance of the system, or even the service. A key measure of success for Early Intervention teams is their ability to reduce time to treatment in psychosis (Duration of Untreated Psychosis). This is not captured in the system. Hospital admission rates are also rather crude measures of the effectiveness of the mental health system, and in Auckland, this does not take into account the extensive community interventions that are available, such as crisis teams and community respite facilities. Similarly, measures of vocational status and physical health are not captured, which would have greater face validity as measures of outcomes, and greater acceptability amongst patients and families.

Lastly, the data used in this audit should be interpreted with a degree of caution. Clinical service data is not collected with the same rigours that apply in clinical research studies. Some of the patients included may not be Early Intervention patients, as these teams do provide a support role to other services, such as General Adult Services in the Community Team when demand peaks. Patients over the age of 30 were excluded for this reason, but patients presenting with other mental illnesses who were under 30 at the time of first presentation would be included. Service utilisation data is also impacted by the complexity of the services provided. For example, a patient who is unwell may receive the services of the Early Intervention Teams, Crisis Teams and Home-Based Treatment Teams during a single episode, and that these contacts may be “double counted” as these episodes are recorded simultaneously by the different teams.

Similarly, the length of stay data for hospitalisation appears also to be similarly affected, as patients who have been moved around units, for example between Intensive Care Units and Standard Wards, have been double counted. Consequently, some of the data may be significantly over-estimating clinical input.

3. International Guidelines for treatment and service configurations in Early Psychosis

Health services in New Zealand are highly influenced by international developments and innovations from around the world. Partly, this is influenced by policy makers, but there is also an effect from a highly internationalised workforce. For example, 40% of psychiatrists in New Zealand are trained abroad, largely from the United Kingdom, the United States, India and South Africa. A significant proportion of the healthcare workforce also have experience of working in the Australian healthcare system, as the two countries have a reciprocal agreement that allows freedom of movement and employment.

With the growing evidence in favour of Early Psychosis Intervention programmes, a number of countries have produced guidelines for the delivery of services:

3.1 Australia

As New Zealand's nearest neighbour, developments in Australia significantly influence policy and service configurations. Some of this is due to shared institutions. For example, the training of psychiatrists is overseen by the binational Royal Australian and New Zealand College of Psychiatrists which results in common training on both sides of the Tasman Sea. Nevertheless, the health system in Australia is significantly different from New Zealand (36). The provision of secondary health services, including community mental health teams and mental health inpatient units, are the responsibility of individual State Health Authorities with considerable differences in the models of care delivery between the seven states which make up Australia.

State-level services are complemented by the provision of Medicare, which is a federally funded universal healthcare scheme where citizens and permanent residents are reimbursed for their healthcare costs. Since 1999, provisions have been made to allow patients to "top up" the universal reimbursement with private insurance coverage. This has resulted in an expansion of privately provided healthcare, including in primary care and mental health services. 52% of psychiatrists in Australia now work in the private sector.

Consequently, there is a significant amount of diversity in the provision and configuration of services for young people in the early stages of psychosis in Australia. Even in Melbourne, home to EPPIC and seen as a centre of excellence in Early Intervention, there have been marked differences in service provision across the city, with the west receiving an Early Intervention in psychosis model, whilst the east of the city has continued to provide community mental health services along traditional lines.

In 2006, a youth mental health initiative was launched by the Department of Health and Aging, called *Headspace (http://headspace.org.au/)*. Aimed at 12 to 25-year-olds, Headspace hoped to support young people with a range of health issues from mental health, sexual health and family difficulties. It also aimed to encompass a wide range of providers and incorporating support for education and employment in addition to healthcare. The health component was funded through Medicare and the federal government.

Headspace caused significant controversy in Australia, particularly from Child and Adolescent mental health providers (37). Amongst the arguments, opponents claim that this new initiative undermined existing services, particularly child and adolescent mental health services. The different funding models risked disinvestment from state-level provided community mental health teams whilst channelling new federal money into private providers.

In May 2013, Headspace was contracted by the Federal Government to implement a national early intervention in psychosis program modelled on EPPIC in Melbourne. Called headspace Youth Early Psychosis Program (hYEPP), it aimed to deliver a seamless pathway of care from primary care into specialist secondary services. Utilising a different funding model from the state health service, these hYEPP teams are expected to deliver outcomes based around the following recommendations outlined below (38):

Early detection

Component 1: community education and awareness

The development of community education programmes to improve mental health awareness in the general public, schools, youth workers, health care professionals and police results in an increase in early detection rates, smoother referral pathways and earlier treatment. Evidence from a recent systematic review suggests that intensive public awareness campaigns that target both the general public and health care professionals may help reduce the duration of untreated psychosis, a major malleable risk factor contributing to poor outcome in psychotic illnesses. Within the EPPIC model, there are designated community education roles, with additional education and awareness activities provided by EPPIC clinical teams.

Component 2: easy access to service

Early psychosis services should be accessible, with one clear contact point, usually a single toll-free telephone number. Referrals are accepted from any source, ensuring a ‘no wrong door’ policy for entry into the service. Young people who meet the entry criteria undergo an assessment within 48 hours of being referred, while those who do not are actively assisted with finding the most appropriate service to meet their needs. The physical location, design and décor of a service is extremely important, as the service needs to be easily accessible via public transport and engaging. The service ensures that the staff and infrastructure are provided to allow a strong focus on home-based care, which promotes engagement of young people.

Component 3: home-based assessment and care

Home-based assessment and care provided by a multidisciplinary team that is flexible in terms of location and operational hours is important for the engagement and treatment of young people with psychotic disorders. The EPPIC model has a youth- and family-friendly multidisciplinary mobile Early Psychosis Assessment and Treatment Team that includes nurses, doctors, social workers, occupational therapists and clinical psychologists and is able to provide self-contained triage, assessment, crisis intervention and home-based acute treatment 24 hours per day, 7 days per week, without the need to revert to generic adult crisis teams.

Acute phase care

Acute phase care is delivered either in the community supported by the Early Psychosis Assessment and Treatment Team or in a dedicated youth-friendly inpatient setting, supported by the Early Psychosis Assessment and Treatment Team where necessary, with clear access to a sub-acute setting during the transition to continuing care for those young people who require this option.

Component 4: access to streamed youth-friendly inpatient care

Access to a youth and family friendly inpatient setting that provides specialist early psychosis care is beneficial for young people with first-episode psychosis who require acute care as it minimises hospital admission trauma and improves the engagement of young people within the service. 19 In the EPPIC model, a youth-friendly inpatient setting provides care until the young person is ready for discharge and ongoing treatment, with inpatient stays being limited to the shortest possible time (<10 days). This early discharge is only possible due to the ongoing support provided by the Early Psychosis Assessment and Treatment team and continuing care teams.

Component 5: access to youth-friendly sub-acute beds

Some young people experiencing a first episode of psychosis may require an additional level of support as an alternative to or following acute care that delivers intensive clinical support in a residential setting. This allows the young person a short-term transition phase in a community-based unit, whether this be a purpose-built facility, such as the Youth Prevention and Recovery Care services in Victoria, or other sub-acute settings or in houses in the general community. Considerations such as location, accessibility by public transport, an appropriate physical environment and the provision of developmentally appropriate activities in a least restrictive setting are important to ensure the youth-friendliness of these settings, as well as the expertise and workplace culture of the staff, who should have a strong background in youth mental health.

Continuing care

Component 6: case management

The treatment and management of young people with first-episode psychosis requires a stable and trusted relationship through which delivery and coordination of care can occur. This can only be delivered using a clinical case management model. The continuing care team provides team-based case management and individually focused psychological and psychosocial interventions. Young people are assigned an individual case manager – a clinical psychologist, social worker, occupational therapist or mental health nurse – and a psychiatrist or psychiatric registrar under the supervision of a consultant psychiatrist. The case manager works collaboratively with the young person and their family or significant others to provide an individually tailored therapeutic approach, centred on the personal relationship, which matches the needs of the young person and their stage of illness. Furthermore, case managers ensure that the young person and their family are provided with psycho-education and linked to other useful support services, including housing, educational, vocational, financial and legal assistance. Under the EPPIC model, case managers have capped, low caseloads of 15–20 clients to allow them to build strong therapeutic relationships as well as deliver specialist and mobile interventions. Continuing care case management should be for a minimum of 2 years, with the potential of an additional 3 years of continuing care for the significant subset of young people who have not experienced a complete recovery by 2 years.

Component 7: medical interventions

Pharmacological interventions, such as antipsychotic medication, are used to manage and reduce psychotic symptoms and should be regarded as a first-line intervention for first-episode psychosis. The use of medication as recommended by evidence-based clinical guidelines has been shown to optimise treatment adherence and speed recovery in young people with first-episode psychosis. It is important to note that the medical care of young people in the early stages of mental illnesses differs from medical care in older patients with established illness in terms of both style and content. Low-dose atypical antipsychotic medication is efficacious for most people with first-episode psychosis and atypical antipsychotics are associated with superior tolerability compared to the typical antipsychotics. A number of pharmacotherapy-related issues arise for young people with first-episode psychosis and ultimately impact the way in which medication is delivered. A 'start low, go slow' prescribing approach is recommended for young people with first-episode psychosis, as this population group responds well and more rapidly than those with more established illness. Physical health issues, notably weight gain and metabolic changes, are a well-established side effect of most antipsychotic medications; the EPPIC model provides physical health monitoring and preventive interventions as a routine part of their service.

Component 8: psychological interventions

Psychological interventions, including individual psychotherapy and cognitive behavioural therapy (CBT), enhance symptomatic and functional recovery in first-episode psychosis. A range of psychological interventions can be provided to a young person based on, and adapted to, their individual needs. This can include stress management, suicide prevention, relapse prevention and substance use reduction strategies. Several psychological intervention programmes have been specifically developed for first-episode psychosis: cognitively oriented psychotherapy for early psychosis, active cognitive therapy for early psychosis, an intervention described by Jolley and colleagues in 2003 and the Graduated Recovery Intervention Program. An uncontrolled trial reported the efficacy of CBT for ongoing positive psychotic symptoms in treatment resistant first-episode patients. Furthermore, in 2010, a systematic review of CBT in early psychosis services concluded that CBT had longer-term benefits in the reduction of symptom severity. Psychological intervention is a fundamental component of the EPPIC model and is delivered by the case managers, as part of their case management role, and a senior clinical psychologist overseeing these interventions.

Component 9: A functional recovery programme

Recovery programmes that include social, vocational and educational programmes for young people with first-episode psychosis prevent loss of function, enhance recovery and improve vocational and education outcomes. Young people with first-episode psychosis face a range of challenges in attaining employment or education goals. The Individual Placement and Support (IPS) model enables a large proportion of young people with first-episode psychosis to return to employment and to fulfil their educational goals. In a randomised controlled study, significantly better outcomes in terms of levels of employment, hours worked per week, number of jobs acquired and employment longevity were observed with IPS compared with treatment as usual group or treatment alone. In the EPPIC model, case managers may provide individualised social recovery interventions as well as facilitating access to group work, educational and vocational services. Specialist vocational and educational recovery workers are integrated within the service and work with all young people who wish to do so.

Component 10: group programmes

Group programmes can enhance symptomatic and functional recovery and provide an alternative medium for therapeutic approaches that may better suit some young people. They reduce social isolation and provide a safe and supportive peer group environment for young people to work on personal issues such as lack of confidence, low self-esteem, anxiety or symptom management. Groups are usually small, with a maximum of eight people involved, and focus on topics ranging from health-related issues, such as stress management, coping with anxiety and reducing drug use, to study, school and work issues, as well as social and leisure activities such as music, art and outdoor adventure.

Component 11: family programmes and family peer support

Family interventions are provided for all family members, close friends or anyone as a significant other of a young person. Family work reduces the levels of distress in family members by providing information and strategies that support the young person’s and the family’s recovery. Family work is offered by case managers with the support of a specific family worker, who may also take on more complex family presentations. Family peer support workers, who have had the lived experience of a young person treated within the EPPIC model, play a key role in this programme by providing proactive face-to-face and phone support to new families and significant others when their family member enters the service.

Component 12: youth participation and peer support

The incorporation of a youth participation programme contributes to ensuring that EPPIC remains relevant to the special developmental needs of young people by facilitating peer support and accountability to them. All clients are eligible to join the youth participation team, which meets regularly to discuss improvements to the service, provide input into staff selection by contributing to interview panels and participate in community development and advocacy activities. Peer support workers who are past EPPIC service users visit current young people in inpatient care, as well as providing support to other clients on an outpatient basis. These workers receive training, mentoring and supervision and are reimbursed for their time.

Component 13: mobile outreach

For those young people who have difficulty engaging with mental health services or those who have more complex needs (forensic issues, homelessness, severe personality disorder, prominent negative symptoms) an increased level of assertive and intensive mobile outreach is required to minimise the risk of incomplete recovery as well as the young person’s risk to self and others. Mobile outreach is provided as part of case management either as a separate sub-team or as part of the usual case management load (requiring monitoring of caseload intensity and acuity) with support from the Early Psychosis Assessment and Treatment team. Interventions are based on clinical needs and may involve, for example, crisis intervention, an increased level of individual therapy, family support and consultation/liaison services.

Component 14: partnerships

EPPIC has established partnerships with other organisations that can enhance the care of young people with mental health difficulties, including primary health care providers, drug and alcohol services and community youth services. This not only enhances the quality and breadth of the service, but also improves the referral and transition points for young people using the service. Partnerships are also developed with academia, clinical schools and professional colleges to foster an ongoing research and learning environment within the clinical service.

Component 15: workforce development

The creation of a highly skilled and clinically expert workforce has been the key to a successful EPPIC service and ensures fidelity to the EPPIC model. Training, attendance at professional development activities such as conferences and workshops, clinical placements, entry level programmes as well as clinical supervision are all essential aspects of this component.

Component 16: ultra-high risk young people

Early detection and intervention during the ultra-high risk stage may prevent or delay the onset of a first episode of psychosis. Treatment for these ultra-high risk young people is aimed at minimising symptoms and distress and maintaining a normal functional trajectory to prevent further deterioration in functioning, as well as to prevent a first episode of psychosis for the young person, and has been shown to lead to a 54% reduction in the risk of transition to psychosis at 12 months. If a transition to full-threshold psychosis does occur, the young person can be treated within the service, which minimises the trauma and potential for iatrogenic harm associated with admission in crisis.

3.2 The United Kingdom

The UK has traditionally benefited from a comprehensive and highly integrated NHS with strong primary care coverage. The NHS remains taxpayer funded and free at the point of use. In the 1990s, the Department of Health issued guidance in the form of National Frameworks which outlined policy priority areas. These were then supplemented by Policy Implementation Guidelines (PIGS).

In 2001, the Department of Health published the Policy Implementation Guideline on Early Intervention in Psychosis Services People for people aged between 14 and 35 (13) with a first presentation of psychotic symptoms. These teams were to provide care for three years. The main components of service are included in Appendix 1. It proposed an Early Intervention Service for a population size of about 250,000. Each care coordinator was to support 1:10 to 1:15 patients, with team caseloads of 120 to 150, and medical support comprising 0.5 Full Time Equivalent (FTE) consultant general adult input, 0.2 FTE consultant child and adolescent psychiatry input and 1.0 FTE of non-specialist doctor support.

Since 2001, there have been significant changes to the configuration of the NHS. The commissioning of services has increasingly been devolved to local areas, with General Practitioners having a greater say on the allocation of resources and the prioritisation of services. There has also been pressure on the NHS with tighter budgets since the global financial crisis and the pressures of increased demand from an ageing population. A report published by Rethink in 2014 “Lost Generation” (39), suggests that 50% of Early Intervention Services have had their budgets decreased, with some reporting budget cuts of 20%. The result has been a reduction in the quality of service and increased delays in accessing help. 58% of services also reported a reduction in staffing numbers.

The National Institute for Health and Care Excellence (NICE) updated its recommendations the treatment of psychosis and schizophrenia in February 2014(40). It emphasised the importance of Early Intervention in psychosis services. Its recommendations are outlined below:

1.3.1.1 Early intervention in psychosis services should be accessible to all people with a first episode or first presentation of psychosis, irrespective of the person's age or the duration of untreated psychosis. **[new 2014]**

1.3.1.2 People presenting to early intervention in psychosis services should be assessed without delay. If the service cannot provide urgent intervention for people in a crisis, refer the person to a crisis resolution and home treatment team (with support from early intervention in psychosis services). Referral may be from primary or secondary care (including other community services) or a self- or carer-referral. **[new 2014]**

1.3.1.3 Early intervention in psychosis services should aim to provide a full range of pharmacological, psychological, social, occupational and educational interventions for people with psychosis, consistent with this guideline. **[2014]**

1.3.1.4 Consider extending the availability of early intervention in psychosis services beyond 3 years if the person has not made a stable recovery from psychosis or schizophrenia. **[new 2014]**

Of particular note, are the recommendations to *open up accessibility to Early Intervention Services to people of all ages*, which is in contrast to the Australian move to focus on more integrated services for younger people. The NICE guidelines also contradict the IRIS guidelines of 2012, which emphasised the importance of youth friendly services. Some of the debate around age criteria has focussed around equity of access to services, particularly for women who present at a later age, but who have better outcomes. The debate has also been informed by the realisation that the annual incidence of psychotic disorders such as schizophrenia varies considerably from place to place, particularly driven by demographic and socio-economic factors (*www.psymaptic.org*). The simple population based recommendations of the PIG of 2001 do not take account of these variations resulting in the over-prediction of cases in rural areas with older populations, and an under-prediction and under provision of services in urban areas. Greater flexibility in age criteria also supports the viability of Early Intervention teams in these rural areas where they need to be of a certain size to sustain the comprehensive Early Intervention package of care.

As with the Australian recommendations, the NICE guidelines also *recommend the provision of services beyond 2 years*, which is consistent with the findings from the OPUS trial.

3.3 Denmark

Like the UK, Denmark has a health system funded by taxation and is free at the point of use. Following the success of the OPUS trial, Early Intervention teams were rolled out across Denmark(41). This development was supported by special grants provided by the Danish government and by 2013 there were 20 teams located across all five Danish Regions. Denmark has a population comparable to New Zealand (5.5 million vs. 4.5 million), but with a substantially higher population density.

Under pining the service is the philosophy that the patient is a "*long awaited guest who you want to feel welcome and at home during a long visit*", and where the relationship is governed by collaboration and respect. The service has three key elements:

(i) assertive community treatment;
(ii) family involvement;
(iii) social skills training.

Staff to patient ratios are kept to 1:10. Initial duration of care in the OPUS service was two years, but a five year service is currently being trialled.

3.4 Canada

Healthcare provision in Canada is devolved to provincial governments. There is universal coverage, with individual doctors and hospitals frequently acting as service providers in a single payer system, and where costs are borne by the government. Each province has its own healthcare policy and, as such, there is no National Early Intervention program. However, a number of provinces including Alberta and British Columbia have well-developed Early Intervention policies and services.

An early psychosis initiative was first funded by the provincial government in 1999 with a gradual expansion of services throughout British Columbia (BC). In 2010, the Ministry of Health Services in British Columbia published its updated Standards And Guidelines for Early Psychosis Intervention (EPI) programs in the province (42). EPI has remained a priority in its mental health services, particularly in the delivery of healthcare to youth, where it sees EPI services having an important role in the continuum of care (Figure 8):

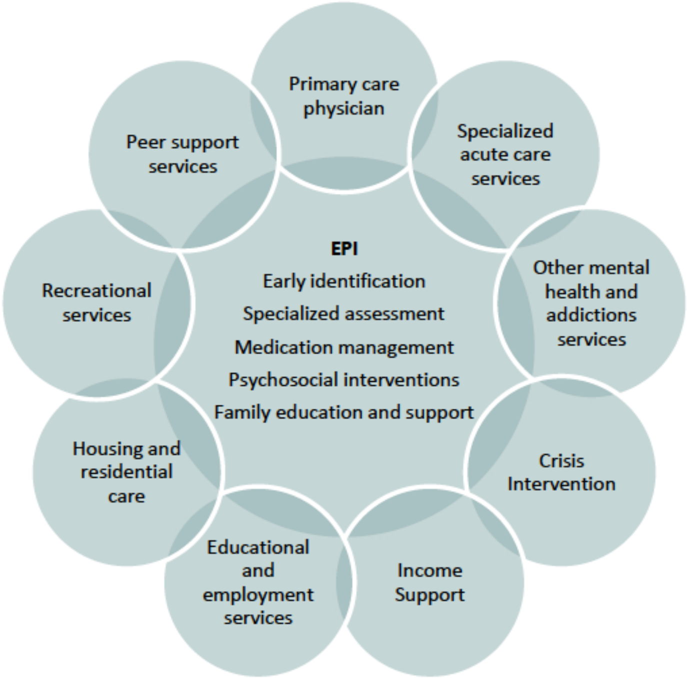

Figure 8. The Role of EPI services in British Columbia

Services in British Columbia are targeted at those aged 13 to 35. EPI services are provided for a minimum of three years, and with a maximum clinical staff to patient ratio of 1 to 20. EPI clinicians are not allowed to carry mixed caseloads (i.e. all patients are early psychosis clients). EPI Services have a number of key performance indicators, which are required reporting. The guiding principles which underpin the service are outlined in below.

1. Care is recovery-oriented

o Care for clients in EPI programs is recovery-oriented and holistic. It extends beyond the reduction of symptoms to include enhancement of functioning, personal development and quality of life. The pursuit of fulfilment, meaning and happiness is acknowledged and fully supported.

- Clients are supported to assume a stance of active self-management.
- Assessment and treatments are not solely focused on pathology, but rather adopt a strengths-based approach.

2. Individuals and families should be engaged in the program as true partners in care

- Engagement is considered a primary therapeutic goal. Extensive efforts should be made to engage both individuals and families where possible at the time of referral and throughout the course of care. Setting treatment goals and the means of achieving them should be collaborative and ongoing. It is assumed that better engagement will lead to better outcomes, as clients will be more likely to remain in treatment. Clients should have access to the support and skills required to direct their own care to the greatest extent possible.

3. Evidence-based practices lead to better outcomes

- Evidence-based practices undertaken by trained caregivers produce better outcomes. This guide can help educate professionals as to those practices currently believed to be optimal. Practitioners should strive to stay within their competencies, advocate for and receive training where needed, and seek others‟ expertise through referral and consultation.

4. Interventions should be phase- and age-specific

- There are phases to a psychotic disorder: prodrome, acute, recovery, remission and relapse. Each phase carries implications for assessment, treatment and support. The types of care offered should be appropriate for the individual’s age and developmental stage.

5. Optimal care consists of integrated biopsychosocial approaches tailored to each individual

- Psychotic disorders produce pervasive changes in individuals and social networks. Care must encompass the entire spectrum of areas important to an individual’s wellbeing rather than focus solely on the signs and symptoms of psychosis. Psychosocial treatments have both direct effects and interactive effects when combined with pharmacological interventions targeting psychosis and associated secondary problems.

6. The stress-vulnerability model accounts best for the development of psychosis

- This model asserts that predisposing factors such as genetic constitution can render an individual susceptible to developing a psychotic disorder. The disorder becomes manifest given sufficient triggering factors. This process can apply to both initial onset and subsequent episodes of psychosis.

7. Care should be provided in the most accommodating setting possible

- The most accommodating setting is one that affords the individual the greatest possible number of personal rights and choices, yet still provides necessary services and safety.

3.5 Hong Kong

The Early Assessment Service for Young People with Psychosis (EASY) programme was launched in Hong Kong in 2001 for people aged between 15 - 25 (43). There are three main components of the programme:

(i) raising public awareness,

(ii) creating an easily accessible channel for service and

(iii) providing phase-specific intervention.

The service is provided by five intervention teams serving independent catchment areas. Each team consists of two psychiatrists, three case managers (psychiatric nurses or medical social workers), and one clinical psychologist (shared between four sites). *The clinician to patient ratio is 1:80*, which is significantly higher than any other comparable service. Each clinician is supported by Non-Governmental Organisation workers who provide social support.

The EASY service has a direct referral pathway and includes the option of telephone based screening for psychosis by nurses. Eligible patients are supported by a case manager through a package of care which includes medical management, psycho-social interventions and family support for two years. They receive on average 1200 referrals a year, half of whom meet their criteria and are accepted into the EASY programme.

3.6 Programmes in Other Countries:

Singapore established an Early Psychosis Intervention Programme (EPIP) in 2001 (http://www.epip.org.sg/), which has reduced the median DUP in the republic from 12 months to four months. Ireland is in the process of developing a Mental Health Clinical Programme in Early Intervention for people developing First Episode Psychosis. It is expected that this will support the development of best practice care pathways, to support their approval and to oversee implementation by the local Mental Health Areas in Ireland.

There are a number of centres of excellence in Early Psychosis across the globe which are associated with research centres. In the US, there are a number of clinics such as the Specialised Treatment in Early Psychosis at Yale University and the First-Episode and Early Psychosis Program (FEPP) of the Massachusetts General Hospital but there is not currently a national programme for Early Psychosis in America. A similar situation exists in a number of European countries including Switzerland, Germany and Italy.

4. Services in Auckland

4.1 The Demographics of Auckland

Auckland is the largest city in New Zealand (population 1.3 million) and is home to a third of all New Zealanders. Auckland District Health Board, which is responsible for the health of the people of central Auckland, has over 468,000 people in its catchment area. Growth is projected at 19 per cent, or 86,000 more people, by 2026. It is ethnically diverse with 52% of the population comprised of New Zealand Europeans, 29% Asian, 11% Pacific, 8% Maori and 2% other. Over 100 languages are spoken in the city and thirteen per cent of the population needs assistance or interpreting when attending health services. Seventeen per cent are aged under 15 years, compared with 22 per cent for all of NZ whilst 10 per cent of the people living in the Auckland DHB area are aged 65 years and over, compared with 12 per cent of the NZ population.

Thirty-nine per cent of the population lives in areas with a New Zealand Deprivation Index of less than seven (10 being the most deprived), with 38% of young people living in areas of high deprivation. 72% of Pacific youth and 49% of Maori youth are in areas of high socio-economic deprivation.

Data from the 2013 census shows that the City of Auckland has a much younger age profile compared to the rest of New Zealand (Figure 9). Life expectancy at birth is amongst the highest in New Zealand, and median household income is $76,500 per annum, the highest household median across all regions in New Zealand.

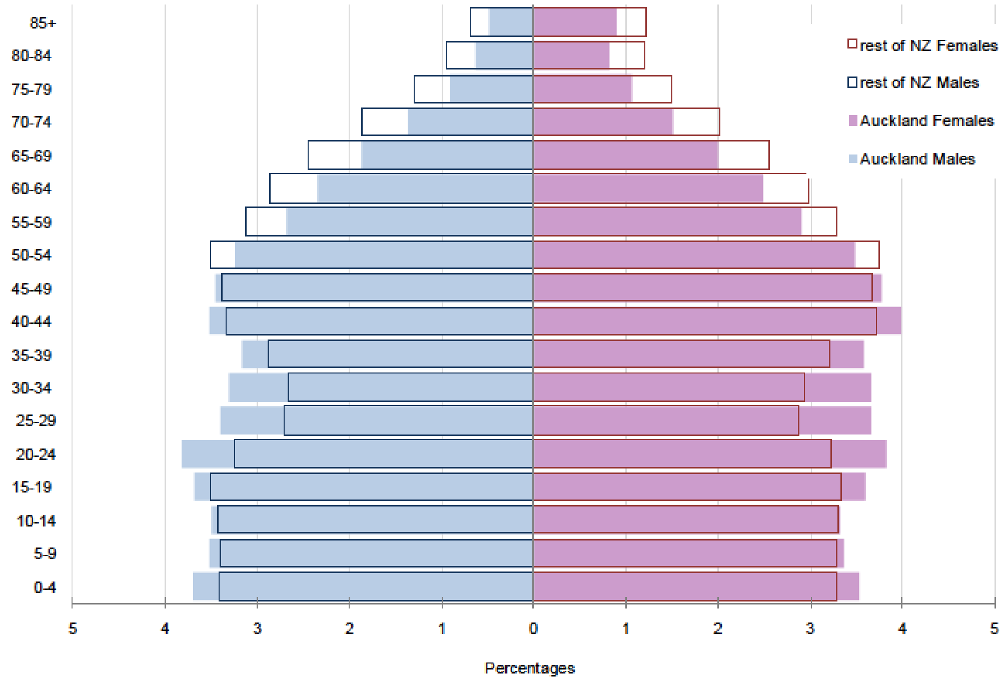

Figure 9. Age-sex structure, Auckland and rest of New Zealand 2013

4.2 Mental Health Resources

Auckland has extensive and comprehensive mental health service provision for its population. There is a 58 bed acute inpatient unit within Auckland City Hospital, *Te Whetu Tawera*. *Te Whetu Tawera* means ‘the evening star’ in Maori and the service was given this name to represent light for people who are unwell and their families in times, in times of darkness.

Four community mental health teams, each staffed with between 45 and 70 clinicians, provide community-based health services. These include community psychiatry, assertive outreach services, maternal mental health and early intervention in psychosis services. Additional regional services provide specialist input for eating disorders and forensic psychiatry. There is also a residential rehabilitation unit, the Buchanan Clinic. Auckland District Health Board also provide consult liaison services to the medical and surgical services, as well as extensive child and adolescent mental health services, including a regional child and adolescent inpatient unit. 24 hour access to emergency psychiatric help is provided through crisis teams based in the community. Culturally orientated services are also provided for Maori and for the Pacific Islander Community.

25% of the DHB mental health expenditure is spent on the Non-Governmental sector. This includes the provision of peer support workers/expert patients, community support workers and employment support specialists. The NGO sector also manages for community respite units, each with four to six beds, and a residential eating disorder unit.

4.3 Blueprint 2 and the National Service Development Plan

In spite of the size and scale of existing mental health services, it is argued that mental health providers will not be in a position to manage expected increases in demand for services over the coming decades. In part, this is due to the shifting patterns of disease within the population and the increasing prevalence of mental disorders, particularly common mental disorders such as depression (44). In 2012, the mental health commission published Blueprint 2 (16), a policy document outlining the future direction of mental health services. This envisaged a greater emphasis on early interventions, particularly in childhood and in youth. Again, the principal focus was on the identification and management of depression, anxiety and substance misuse, but there were also recommendations around improving the quality of life and opportunities for recovery in people affected by severe and chronic mental illnesses, such as schizophrenia.

Blueprint 2 influenced the thinking behind the Ministry of Health's mental health service development plan, *“Rising to the Challenge*” (15), which also emphasised child and youth health, but explicitly identified early intervention in psychosis as a policy priority.

4.4 Changes in Primary Care and Locality Planning

Healthcare funding in New Zealand is complex. Secondary care including hospital care, specialist outpatient appointments and mental health services are a taxpayer funded and free at point of use. However, primary care is provided by private providers and is funded through a complex formula of fee-for-service plus capitation payments from the DHB, where most people pay between $50 and $90 for a 15 minute GP appointment. This funding model has hampered the development and delivery of complex healthcare interventions in primary care and resulted in greater pressures on services and secondary care.

This has been particularly challenging in mental health. It is estimated up to a third of presentations in general practice are mental health-related (45), and primary mental health interventions have been difficult to establish. Over recent years, the DHB has been working in partnership with primary care providers to develop "localities". The aim is to develop networks of local healthcare providers to provide interventions in primary care which have traditionally been in hospital. For example, the management of DVTs is now delivered in the community through these networks.

There is an expectation that these localities will provide a framework for greater integration between primary and secondary mental health care providers. It is hoped that patients will experience a more seamless flow through different levels of care and that this will also result in increased efficiency with the system and an increased capacity to see more patients with mental ill health. Better integration should also lead to improved outcomes, for example improved physical health outcomes in mental health patients by improving their engagement with General Practitioners.

5. Reinvigorating and Redesigning Early Intervention in Psychosis Services in Auckland

Early psychosis services in Auckland are well regarded and staffed by highly skilled and motivated clinicians with a wealth of experience. Any process of reinvigorating and redesigning services in Auckland should aim to engage with patient, family and staff groups, build on the existing strengths of the service whilst also adapting to the latest evidence-based practice and changes in the surrounding health system.

They should also adhere to the triple aim principles guiding the development of health services in New Zealand:

i. improved health and equity for all populations,
ii. improved quality, safety and experience of care and
iii. best value for public health system resources.

5.1 Vision, core principals and leadership

A clear vision for service helps define and shape its structure and its evolution. It is also an opportunity to engage multiple stakeholders to work towards a common goal. Internationally, early intervention in psychosis services share a number of core principles. Firstly, there is *active community engagement and education* about psychosis to raise awareness and encourage people to seek help early, thus reducing the Duration of Untreated Psychosis. Secondly, there is a *low threshold for the assessment* of anyone suspected of experiencing a psychotic episode. Services are also designed to be *age appropriate*, with special consideration given to the peak onset of psychotic disorders in youth. Interventions are also *phase specific* where services are designed to adapt to the differing requirements and needs of someone as they experience an acute episode, followed by phases of recovery. Early intervention services are *optimistic and instil hope*. They have a *broad psychosocial approach* incorporating optimum pharmacological treatment, psychological treatment, family work, positive physical health outcomes and vocational support, all of which continue to be provided beyond the immediate acute episode.

Successful Early Intervention Services have also been characterised by *strong and clear leadership*. This helps guide and sustain the vision of the service and adapt to change. Strong leadership also supports the development and incorporation of up-to-date evidence based practice into the day-to-day service provision, and facilitates better interfaces with communities and other stakeholders such as health care providers, as Early Intervention Teams often need strong partnerships to succeed.

Recommendation 1: It should be guided by a *clearly articulated vision of aims and purpose* of the service

The Early Intervention Team requires a strong vision that should be developed jointly with all stakeholders.

Recommendation 2: It should incorporate *key components of an Early Intervention in Psychosis Service approach*

To ensure comparability and fidelity to international models, the core components of service should include an:

i. optimistic and hopeful approach to psychosis,
ii. community engagement and education,
iii. active early detection,

iv. a low threshold for assessment,

v. age appropriate (particularly youth friendly) services,

vi. interventions which are phase specific,

vii. a broad psychosocial approach to treatment and recovery, and

viii. the aim of ultimate *integration into mainstream health, vocational and social supports*

Further core components should be developed with stakeholders.

Recommendation 3: It should have *clearly defined managerial and clinical leadership*

Strong leadership is required to support the on-going development of the service, the sustainability and fidelity of the model, and to ensure that the service provides evidence based interventions. The Early Intervention in Psychosis Service should have *clear managerial and clinical leadership* who are accountable for the performance of the service, and a more *integrated team structure* for a consistent application model and greater scale.

5.2 Community awareness, partnerships and early detection:

The evidence from TIPS study in Norway showed that community awareness and education about psychosis improves referral rates and shortened the time it took for people to seek help. Such programs should be an integral part of the early psychosis services in Auckland. Current Early Intervention configurations do not allocate any dedicated resources for such activity and most activity of this nature happens at a local level through informal ties.

Recommendation 4: Dedicated resources should be allocated for improved *community awareness, education and early detection*

Dedicated resources should be allocated for improved community awareness and education. Greater collaboration with health promotion agencies such as “Like Minds Like Mine” (http://www.likeminds.org.nz/), youth focused NGOs like Youthline (http://www.youthline.co.nz/), primary care organisations and educational establishments should be promoted.

5.3 Low barrier pathways for the rapid assessment of young people suspected of psychosis

It is difficult to ascertain from the data available what the current Duration of Untreated Psychosis is in the Auckland service. The evidence from around the world, including diverse places such as Australia, Hong Kong and Singapore, suggests that the existence of Early Intervention services reduces delays in treatment. Current referral pathways from the community or GPs are triaged through Referral Management clinicians at ADHB. There is evidence from other countries such as the United Kingdom that delays within mental health services contribute substantially to prolonged Duration of Untreated Psychosis. In countries such as Canada, they have retained generic referral pathways but incorporated minimum standards to compensate, for example including a key performance indicator of a 48-hour time to Early Intervention assessment from first referral to anywhere in the mental health system. In Hong Kong, the availability of a "hotline" coupled with a telephone based nursing assessment appears to have improved care pathways to care.

Recommendation 5: The Early Intervention in Psychosis Service should have the *capacity to take direct referrals.*

Early Intervention Services should have the capacity to take direct referrals. These may shorten delays in accessing treatment but may also have the effect of enhancing relationships between Early Intervention Service and partner organisations as outlined in Recommendation 4. A telephone hotline or telephone assessment should also be considered.

Recommendation 6: Explicit *Key Performance Indicators (KPIs) should be established* to monitor the performance of the service

KPIs and outcome measures should be developed in partnership with stakeholders, and then collected and integrated into routine practice. These could include KPIs relating to early detection and community awareness (e.g. the percentage of Duration of Untreated Psychosis < 6 months), timeliness of an Early Intervention assessment (e.g. time to assessment from first contact with mental health services), physical health outcomes (e.g. Healthy Active Lives (HeAL) targets) and vocational outcomes.

5.4 At-Risk Mental States

There has been considerable interest in developing services for young people in the prodromal phases of a psychotic illness. These services specifically target young people at an increased risk of developing schizophrenia. Whilst the research in this area is promising, these services are largely researched based units attached to universities and there has been no large-scale rollout internationally. More recent studies suggest a conversion rate to psychosis of 10 to 20%, with the utilisation of case management approaches and resources comparable to full Early Intervention Services. Expanding services to include young people at risk of psychosis could potentially increase the commitment of resources by the DHB five to ten fold.

Recommendation 7: *At Risk Mental States or prodromal clients should be excluded* from the standard provision offered in the DHB at present, but the DHB should be open to a policy change as more evidence emerges.

At Risk Mental States or prodromal clients *should be excluded* from the standard provision offered in the DHB at present, but the DHB should be open to a policy change as more evidence emerges. The DHB may choose to work in collaboration with academic or research organisations to better understand this population in a New Zealand context.

5.5 Target age range

There is been a divergence in approach to the target age range internationally. Most notably, Australia has gone down the route of incorporating early psychosis services in a much larger roll-out of comprehensive primary health services for young people. The United Kingdom, which has a significant strength in its universal provision of GP based primary health care, has recently recommended removing age range limitations for Early Intervention Services. Whilst the configuration of wider health resources has influenced these decisions, there has also been a debate about equity, particularly for women where the age on onset is significantly later. However, women also have much better outcomes in schizophrenia with higher rates of social functioning, lower admission rates and a lower lifetime risk of suicide (46) (47). The Early Intervention audit data from ADHB does not suggest any statistical difference in risk of admission based on gender or age.

The neighbouring DHBs, Waitemata and Counties Manukau, have limited their Early Intervention Services to youth with 14-25 and 16-30 age ranges respectively. They have also moved these services into the portfolio of Child and Adolescent Mental Health Services (CAMHS) in an effort to build more integrated youth friendly services.

The approach in Waitemata and Counties Manukau has differed from the Australian experience as these services remain stand alone Early Intervention Services for psychosis in a portfolio of services which primarily target school-aged children. They have not been accompanied by the development of any new services for young people over the age of 16, contrasting with the development of Headspace in Australia, and where Early Intervention Services sit amongst a suite of youth mental health services, including those targeting depression, anxiety and addictions. The Waitemata and Counties Manukau Early Intervention Services continue to rely on the wider adult service infrastructure for referral management, crisis intervention, community respite and in-patient services as their peak age of patient is in the 19-24 age range. They have not been able to easily take advantage of the networks and partnerships of the child and adolescent services, as the configuration of services around a school age child differs significantly from a young adult, yet remain disconnected from adult services.

DHBs in other parts of New Zealand have merged Early Intervention Services into CAMHS services. In many instances, this has helped build sustainably sized services to support much smaller rural populations with proportionately fewer young people. Auckland has the population size, density and youthfulness to sustain complex youth specific services, and a population profile with increased incidence and rates of psychotic disorders to warrant dedicated early intervention in psychosis services.

Recommendation 8: ***Maintain the current target age range but modify the criteria for 16 – 18 year olds to be based on educational status***

Auckland should broadly maintain the current target age range but *modify the criteria for 16 – 18 year olds to be based on educational status*, with children who are at school remaining under the CAMHS Early Intervention team (with access to CAMHS in-patient facilities, school nurse networks, etc.) and young people who have left school should be supported by the youth focused adult team. The upper age limit should remain at 30 to retain a youth friendly focus. Adult Early Intervention Services should remain under the Adult Mental Health Portfolio.

5.6 Period of Early Intervention

A two-year period of service is no longer consistent with international norms or recent evidence.

Recommendation 9: The *duration of service* provided by early intervention services at ADHB should be *increased to a minimum of three years*, with the option to extend this to five years where necessary.

The duration of service provided by early intervention services at ADHB should be *increased to a minimum of three years*, with the option to extend this to five years where necessary.

5.7 Staffing ratio and configuration of teams

There is a range of staffing ratios seen internationally with no clear evidence around the optimal mix and where these are heavily dependent on the wider infrastructure available. In the New Zealand mental health system, it is important to maintain a relatively low patient to clinician ratio to ensure and assertive approach. Most teams currently aim for a 1:10 ratio. Extending the period of service delivery to three -five years may reduce the intensity of patient need.

Recommendation 10: ***The ratio*** **of** ***case manager / care co-ordinator to patients should be capped at 1:15***

An increased ratio of *one case manager / care co-ordinator to 15 patients* is recommended. This figure does not include psychiatrists, support workers, peers, and administrative staff, which would also have to be factored in.

Greater use of integrated peer support workers, employment specialists, educational support specialists and cultural workers should allow more efficient use of clinician time.

Recommendation 11: ***Increase the number of non-clinical supporting staff***

Increase the number of non-clinical staff and integrate them into the service

Recommendation 12: ***Cap Caseload for Psychiatrists at 1:80 per FTE***

Psychiatrists in adult community mental health teams have a caseload of about 100 to 125 patients per FTE. It is recommended that psychiatrists in community Early Intervention Services teams have a lower *caseload of about 80 per FTE* to account for the need for greater assertive and home-based treatment.

5.8 Model of intervention

Early intervention services in Auckland have been providing broad-based, assertive, psychosocial interventions, but these are difficult to track whether this is being applied in a consistent and equitable manner to all patients and across all sites.

Recommendation 13: ***Develop a local Service Delivery framework***

A service delivery outline (similar to the NHS Policy Implementation Guidance in Appendix 1) should be developed in collaboration with service users, their families and clinicians to specify domains of care, interventions and outcome measurements. This matrix should provide a framework to audit service delivery and inform quality improvement and service development.

5.9 Cultural competencies

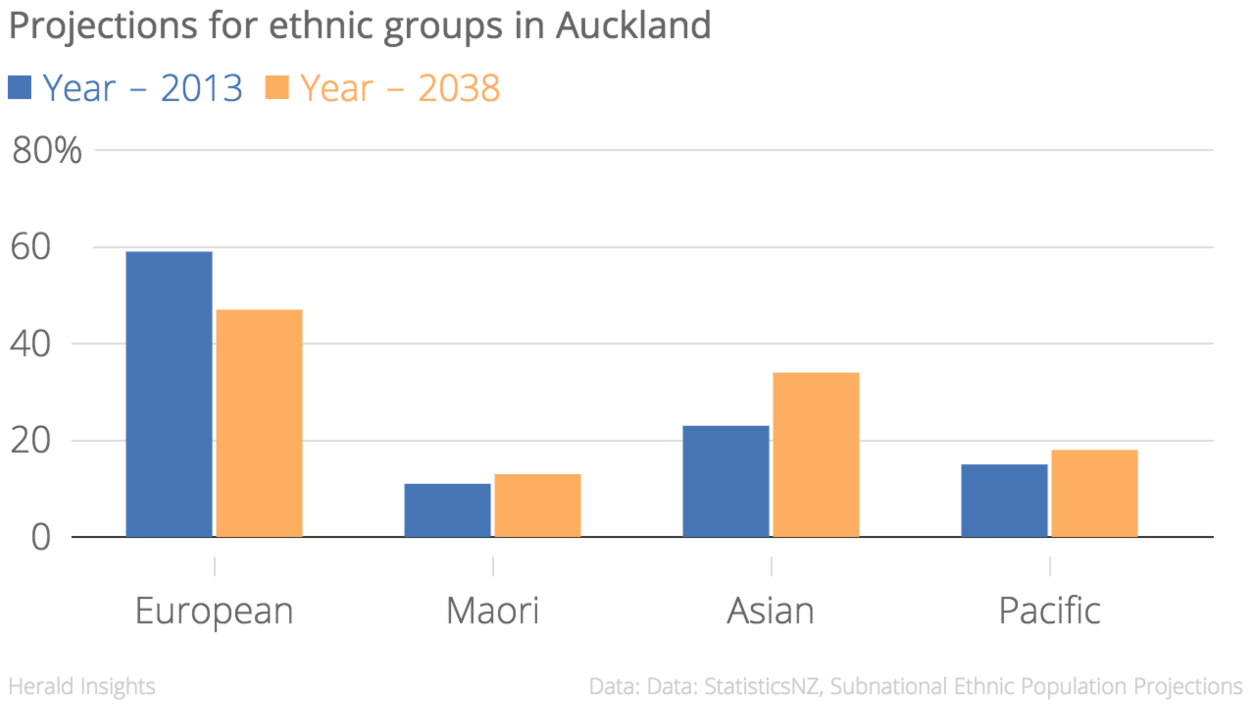

Figure 10. Projections for Ethnic Groups in Auckland in 2038

Future projections suggest that the ethnic, cultural and linguistic composition of Auckland will continue to change, with a greater proportion of people from Maori, Pacific and particularly, Asian backgrounds Figure 10. The data from the ADHB audit also suggests that Asian patients are 50% more likely to be admitted to hospital whilst under Early Intervention Services.

Recommendation 14: ***Incorporate and continue to develop cultural competencies and cultural interventions to meet the current and future needs of the multicultural population of Auckland.***

Early Intervention Services need to incorporate and continue to develop cultural competencies and cultural interventions to meet the needs of the multicultural population of Auckland. Particular attention should be spent on improving cultural competencies supporting Asian patients, who are forecast to be the fastest growing segment of the population.

5.10 Youth health services

There are no plans at present to develop youth health services or youth hubs in Auckland along the lines of the Headspace programme in Australia. This may change in the future and consideration should be given to how early psychosis service might be integrated into these services.

5.12 Research & Evaluation

There is a strong history and culture of research embedded within many Early Intervention in Psychosis Teams around the world. This has positively contributed to the evidence base around the efficacy of the model and has supported health care planners, managers and clinicians in helping individuals with psychosis in making informed choices about their care. There is a paucity of knowledge around the experience of psychosis and schizophrenia in New Zealand and the need to better understand how this impacts on lives locally. New Zealand is also very innovative in a number of areas, such as the involvement of peers in service provision, and a stronger research culture here in Auckland would help the development of services worldwide.

Recommendation 16: ***Develop and Integrate Research Capacity***

Lastly, research capability should be integrated within the service model to support quality improvement, better understand patient's needs and outcomes, assessed the efficacy of interventions (particularly in local contexts) and to shape and develop new services.

6. Conclusion

Auckland has been pioneering in the adoption and implementation of Early Intervention in Psychosis models but the basic design of the service has not changed in almost 20 years.

In the years since the establishment of services, there has been a growing body of evidence informing the configuration of services, the duration of intervention and the cost effectiveness of services, which has impacted on the design and configuration of services in Australia, Canada, Hong Kong, The United Kingdom and Denmark.

A review and possible redesign is an opportunity to incorporate the best evidence and practice from around the globe into the provision of services in Auckland. It would also help align the DHB's services with national policy priority areas as outlined in the National Service Development plan. Early intervention services sit well within the *Triple Aim* framework. They have *a population focus* and particularly look to address a major cause of disability in the population. The interventions are *clinically effective and popular with patients* and their families. There is also *strong evidence for their cost effectiveness*, particularly through reducing inpatient mental health bed use.

This report proposes 15 recommendations outlining reforms to the service. Central to these recommendations is a need for leadership and integration of services to build critical mass for the delivery of complex interventions, and to support the engagement of patients, their families and communities to develop the service, as well as the need for partnerships with organisations important to the patient group. Services should be evidence-based and continuously improved through patient feedback, staff input, Lastly, this report and the recommendations contained within, should be used as a *starting point for discussion and consultation*, and where the information contained in this report helps inform and stimulate a debate about how we continue to improve the quality of services provided through the district health board. Any change process should involve widespread consultation of all stakeholders, and the DHB should commit to investing time, human and political resources to support and facilitate meaningful systems change and innovation to best serve the Auckland community.

Appendices

Appendix 1: NHS Policy Implementation Guidelines on Early Intervention in Psychosis Services 2001:

Raising awareness of psychotic illness	☐ Active involvement in community-based programmes to reduce stigma associated with psychotic illness ☐ Symptom awareness programmes for primary care, educational institutions, social services and other relevant agencies	☐ See service specification for Mental Health Promotion Framework (section 7 of this guide) for information on effective programmes ☐ Awareness programme needs to emphasise the often ambiguous and subtle ways in which psychotic illness can develop
Focus on symptoms	☐ All professionals need to understand the many and varied ways in which psychosis can develop and the spectrum of 'normal' mood and behavioural changes that can occur during adolescence and early adulthood ☐ Professionals and agencies working at the first point of contact must feel free to refer young people for an expert assessment based on suspicion rather Than a certainty of psychosis ☐ Treatment needs to focus on management of symptoms and sufficient time needs to be allowed for symptoms to stabilise before a diagnosis is made	☐ Diagnosis can be difficult in the early phases of a psychotic illness. The services should be able to adopt a 'watch and wait' brief when the diagnosis is unclear
Age, culture and gender sensitive service	☐ Effective links with youth and young person's services should be established ☐ 24 Hour access to translation services should be available ☐ Single sex accommodation and gender sensitive services should be provided (See section 8 for guidance on developing culturally competent services)	☐ Onset of symptoms usually occurs in adolescence or early adulthood. Services need to reflect this. ☐ The high prevalence of diagnosed psychosis in certain groups emphasises the importance of culturally competent services ☐ Specialist services that comply with the Children Act are needed for service users who are 14 to 18 years old

Early detection	☐ Training programmes and written guidance for GPs and other key agencies are needed on the importance of early detection and how to refer people with potential early psychosis ☐ Regular audit of effectiveness of referral pathways and training programmes	☐ Pathways of care must be explicit and understood by all involved ☐ Access to assessment should be easy and rapid
Assessment	☐ Service user centred, multidisciplinary assessment co-ordinated by care co-ordinator ☐ Sufficient time should be allowed to develop a relationship and let symptoms stabilise ☐ Physical Health Assessment where appropriate	Comprehensive assessment to include as a minimum: ☐ Psychiatric history ☐ Mental state examination ☐ Risk - including suicide risk ☐ Social functioning and resource assessment ☐ Psychological assessment ☐ Occupational assessment
Production of comprehensive care plan	☐ Initial care plan produced within a week of assessment ☐ Initial care plan comprehensively reviewed at three months ☐ Care plan updated at least six monthly	☐ Care plan flexible enough to adapt to changes in the level and type of care required
Early and sustained engagement	☐ Allocation of dedicated community-based care co-ordinator to each service user ☐ Assessment should take place in the service user's home or other low stigma setting ☐ Sustained engagement using an assertive outreach approach so that no service users are 'lost to follow up'. ☐ Failure to engage in treatment should not lead to case closure.	☐ Lack of clear diagnosis should not lead to case closure. Instead an active 'watching brief' should be adopted if there is a suspicion of psychotic illness but no firm diagnosis. ☐ See Assertive Outreach Service Specification (section 4 of this guide) for more information on the assertive outreach approach ☐ Focusing on the strengths and interests of the service user and the benefits that contact with the service can bring can help improve engagement and

Medication	☐ Use of **low** dose or atypical neuroleptics first line and consideration of mood stabilisers and antidepressants if appropriate ☐ Service user involved in decision making and monitoring effects ☐ Care designed to improve concordance ☐ Standard side effect monitoring tools to be used regularly by staff and service user	☐ Local evidence-based prescribing and therapy protocols should be developed and used ☐ Choice of medication dependant on clinical condition ☐ Specialist support from CAMHS expertise needed when prescribing for under 16 year-olds ☐ Avoidance of and careful attention to side effects are important to ensure effective treatment and long term engagement with services
Psychological therapies	☐ Use of cognitive behavioural therapy as appropriate ☐ Psycho-education ☐ Information provided to service user about local recovery or service user groups	☐ Cognitive behavioural therapy can be of considerable benefit to service users ☐ Promotion of coping skills is vital
Family/carers/ Significant others involvement and support	☐ Family/carers/significant others should be involved in assessment and treatment process as early as possible ☐ Provision of psycho-education, family therapy and support ☐ At least monthly contact with family/carers/significant others ☐ Connexions workers	☐ Engagement of family/friends improves assessment, and the long term outcomes of the service user, and can alleviate stress within the family. ☐ Care must be taken to engage and support **all** those important to the service user. This is particularly important if the service user has left home
Addressing basics of daily living	Care plan should address all aspects of daily living	☐ Unstable living and financial circumstances are known vulnerability factors for relapse. ☐ However, early reliance on disability allowance can hamper rehabilitation and chances of finding valued employment. Every effort must be made to provide an effective pathway to valued education and occupation

Providing pathway to valued education and occupation	☐ Vocational assessment (if required) should take place within 3 months of referral ☐ An education or training plan/pathway to valued employment should be produced within 3 months	☐ Formal links with key agencies and schemes such as local careers advisory services, ConneXions, New Deal, Training and Enterprise Agency, further education colleges, voluntary organisations etc. must be established. ☐ Early referral is vital. The longer an individual remains out of work/education in the early phase, the harder it becomes to gain employment/participate in education later on.
Treating co-morbidity	Regular assessment of common co-morbidity's particularly: ☐ Substance misuse ☐ Depression/suicidal thoughts ☐ Anxiety disorders	☐ Early intervention team should have core skills to assess and deal with common co-morbidities. ☐ Specialist help for any of these conditions should also be available. Care co-ordinator should co-ordinate provision of care as appropriate. If referral is necessary, early intervention team should continue to have overall responsibility for the service user.
Relapse prevention plan	☐ Individualised early warning signs plan developed and on file ☐ Relapse prevention plan agreed with service user and involve family/carers	☐ Changes in thought, feelings and behaviours precede the onset of relapse but there is considerable variation between service users. Development of individualised plans can be effective in reducing the severity of relapse.

Crisis plan	☐ Service user/family/carers know when and how to call for help ☐ Intensive support in the community provided by the team during the crisis ☐ If acute care is thought to be required, joint assessment should take place between early intervention team, crisis team and/or acute care team so that the least restrictive / stigmatising setting for care is arranged	☐ Avoidance of restrictive / stigmatising care wherever possible ☐ As much treatment provided in the community/service user's home as possible ☐ Links with crisis team to ensure 24 hour crisis team available
Inpatient and respite care	☐ Avoidance of hospitalisation if possible and provision of alternatives to hospital care e.g. community hostels, cluster homes, day care ☐ If hospitalisation is needed ☐ Separate age, gender and culture appropriate accommodation should be provided ☐ Regular, formal joint (inpatient and early intervention staff) review to ensure service user is transferred to the lowest stigma/restrictive environment as soon as clinically possible ☐ Early intervention team to be actively involved in discharge planning	☐ Avoidance of trauma and stigma associated with hospitalisation is important to reduce harm and ensure long term engagement ☐ Service user/family/carers involved in decision making and discharge planning as much as possible ☐ Primary care and other services to be involved in discharge planning as appropriate and kept informed of discharge plans
Regular review	☐ Regular team review of effectiveness of care ☐ Second and third line pharmaceutical and range of psychological treatments considered where necessary	☐ Local evidence-based prescribing and therapy protocols should be developed and used ☐ Avoidance of and careful attention to side effects are important in ensuring effective treatment and long term engagement with services ☐ Service user actively involved in decision making and side effect monitoring

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