Background: Much research has been conducted to establish best practice in psychosocial interventions for mental illness. The challenge of ensuring that best practice is delivered to consumers has historically been left to program managers. This research contributes to the science of technology transfer: assessing the transferability, uptake and effectiveness of a comprehensive psychological intervention within routine mental health services.

The Illness Management and Recovery Program (IMR) was developed as one of six evidence-based practices in the (US) National Evidence-based Practices Project. The paper reports on the implementation of the IMR in Newcastle, Australia, and outcomes from both Australian and US sites.

Methods: This study comprised a multicenter, international effectiveness study of a comprehensive, evidence-based psychosocial intervention for serious mental illness. The study centers included public mental health facilities in Newcastle and North Carolina. Rigorous fidelity and outcome measures were conducted at baseline, postintervention (9 months) and at follow-up (12 months).

Results: Retention in this comprehensive program was satisfactory (76%). Statistically significant improvements were noted on a range of measures including the BSI, GAF, Coping Skills subscales, Knowledge of Illness, and the Recovery Assessment Scale.

Conclusions: The pilot data support the feasibility of implementing the IMR program in routine mental health settings. The findings suggest that participation in the program is associated with benefits in illness management, progress toward recovery and improved functioning. Individuals completing the IMR program reported significant improvements in hope, coping self-efficacy and distress-related to symptoms.

Constructing longitudinal measures of maternal morbidity using a population health database: is use of the index birth record sufficient to identify obstetric risk factors for schizophrenia?

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Background: Western Australia (WA) has extensive record-linked population health data collections. Midwives' records of WA births during 1980–1992 inclusive were linked and validated by the author to form sibships, which enable longitudinal family studies. Binary indicators of maternal morbidity were created using this database of prospectively collected birth data. A validated system, using case note reviews, for scoring obstetric complications as risk factors for psychiatric morbidity has been adapted for coding population data. This will be extended to 2001 births and include the mother's clinical history.

Methods: Women who have had only one birth during this period, who had multiple births or who had missing births in their sibship were excluded from analysis. Codes created reflect morbidity in the current pregnancy only, the one immediately prior, any prior pregnancy or, the current or any prior pregnancy.

Results: The database includes records of 472 733 births to 249 119 women with paternal data available for the majority of children. Of these, approximately 90 000 (36%) women were eligible for inclusion. Of the 67 242 eligible women, who delivered during 1980–1992, severe underestimation of maternal conditions, affecting pregnancy, such as thyroid dysfunction, essential hypertension or epilepsy occurred when only index birth records were used.

Conclusions: Using data from the index birth only could underestimate the effects of maternal morbidity, as risk factors for outcomes such as schizophrenia, when compared with analysis of models that use longitudinal binary indicators of current and prior maternal illness.

Altered tripartite synapse function: is this the problem in schizophrenia and bipolar disorder?

B Dean

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Schizophrenia and bipolar I disorder are serious psychiatric illnesses that affect approximately 4% of the Australian population. Both illnesses are thought to occur in individuals with a genetic predisposition after they encounter as yet unknown detrimental environmental factors. Postmortem central nervous system (CNS) studies have been undertaken to identify the combined impact of these two factors on both cellular and molecular cytoarchitecture. In particular, studies from our laboratories have shown changed levels of the glial-derived proteins apolipoprotein E and D in the cortex of subjects with schizophrenia and bipolar I disorder. In addition, we have shown changes in levels of S100β, in the dorsolateral prefrontal cortex from subjects with bipolar II disorder. Significantly, it is known that levels of S100β are known to be potently regulated by serotonin through the serotonin1A receptor and receptors for apolipoprotein E are localized on neurons. Our data would therefore support the hypothesis that at least part of the pathology of schizophrenia and

bipolar disorder are because of a breakdown in communication between neurons and glia, which occurs most potently at the tripartite synapse. Our published data and recent data from our microarray study have now shown that there is a decrease in the expression of specific apolipoprotein E receptors in the CNS of subjects with schizophrenia, further supporting our hypotheses of altered neuronal glia communication in psychiatric disease and will be summarized in this presentation.

Time course of illness prior to a diagnosis of bipolar disorder or schizoaffective disorder

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Background: Evidence suggests that diagnostic delay from first episode of illness may be many years. Treating illness early in its time course is associated with a better prognosis.
Methods: Participants ($n = 240$) were enrolled in the Bipolar Comprehensive Outcomes Study (BCOS). A questionnaire was devised to collect information about participants from their first onset of symptoms of mental illness to when they received a diagnosis of bipolar disorder or schizoaffective disorder. The questionnaire was administered at interview by BCOS researchers when the participant was euthymic.
Results: Symptoms of mental illness were first experienced at 20.17 ± 10.26 years (mean $\pm$ SD; $n = 207$) and mood swings at 21.19 ± 11.76 years (mean $\pm$ SD; $n = 191$). Symptoms of depression were first experienced at 21.11 ± 9.98 years (mean $\pm$ SD; $n = 195$), a full episode of depression at 23.64 ± 9.76 years (mean $\pm$ SD; $n = 191$), symptoms of mania at 24.24 ± 11.48 years (mean $\pm$ SD; $n = 202$) and a full episode of mania at 26.43 ± 10.41 years (mean $\pm$ SD; $n = 196$). Medical treatment was first sought at 26.26 ± 10.18 years (mean $\pm$ SD; $n = 207$). Participants first received a diagnosis of bipolar disorder or schizoaffective disorder at 31.43 ± 11.34 years (mean $\pm$ SD; $n = 206$). Having had a previous diagnosis other than bipolar disorder or schizoaffective disorder was reported by 116 of 206 participants who answered this question.
Conclusions: Prior to being diagnosed and treated for bipolar disorder or schizoaffective disorder, partici-
pants typically experience a long time course of symptoms, episode and treatments.

A central dilemma in the mental health sector: structural imbalance

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Background: The provision of mental health services is subject to persistent criticism, often with the implication that allocated resources are inadequate. However, the mental health sector is also subject to another dilemma, which we define as a 'structural imbalance' problem.
Methods: The study shows the dimensions of structural imbalance in Australia's mental health sector by recourse to two data sets: the Mental Health and Wellbeing: Profile of Adults, Australia 1997, published by the ABS; and the National Minimum Data Set – Institutional Mental Health Services published by the AIHW. This study also examines the concept by reference to the Australian Government's COAG mental health initiatives announced in April and state government responses in July 2006.
Results: The two dimensions of the structural imbalance are 1) that some people, with no clinical manifestations of mental illness, consume mental health services and 2) another group of people have clinical manifestations of mental illness but (for various reasons) do not consume mental health services. We show how the situation coexists with various patterns of resource distribution in the public and private health sectors, acute vs. chronic conditions, institutional vs. noninstitutional service provision and private vs. public medical practice.
Conclusions: 'Throwing more money' at the preexisting structures will do nothing to address the structural imbalance problem. Remedies are discussed by reference to the content and processes of reform undertaken in the British National Health Service in recent years.

Anxiety, depression and the HPA axis in human pregnancy: links to postpartum mood

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Background: Most studies investigating maternal mood across the transition from pregnancy to the postnatal period have focused on depression. In contrast,