

ACE–PREVENTION PAMPHLETS

GENERAL POPULATION RESULTS PAMPHLET 13

COST-EFFECTIVENESS OF PREVENTION OF PSYCHOTIC DISORDERS

1. MAIN MESSAGES

- Psychological and/or pharmacological treatment for people who are at “ultra-high risk” for psychosis provides excellent value for money though further evidence of intervention effectiveness is required

2. BACKGROUND

The term “psychotic disorders” is an umbrella term encompassing a broad range of disorders including, but not limited to, bipolar disorder, schizophrenia, depression with psychotic features and schizoaffective disorder. The most common psychotic disorder is schizophrenia, though there is also considerable heterogeneity in the way in which schizophrenia presents between different people. It has been traditionally thought that psychotic disorders were not preventable, with recent literature, largely pioneered here in Australia by Professor Pat McGorry and colleagues, focusing on early detection and treatment of such disorders during the “critical” or early phase of treatment to try and improve the prognosis associated with such conditions. However more recently, thinking has shifted to more indicated interventions for the prevention and possible amelioration of psychotic disorders if they become manifest. These indicated interventions identify young people (usually aged between 15-25) who are at “ultra high” risk of psychosis. Professor McGorry and colleagues at the Orygen Research Centre have been instrumental in developing the criteria by which “ultra-high” risk is defined and includes criteria such as those found in the prodromal state of schizophrenia (simply defined as a period of time before the emergence of frank psychotic symptoms when “something is not quite right”) as well as marked deterioration in functioning (McGorry, Yung et al. 2002). Furthermore it is usually only youth who seek help that are offered such interventions as such symptoms can be quite common in youth of this age so the possibility of very high false-positives needs to be balanced against targeting the youth who will benefit from such interventions (Yung, McGorry et al. 2007)

3. INTERVENTIONS

There are three studies which evaluate the treatment of youth who are at ultra-high risk for psychosis, one is a pharmacological and psychological intervention undertaken here in Australia by Professor Pat McGorry and colleagues, the other is a cognitive therapy intervention and the third is pharmacological in nature (olanzapine). As all three interventions are different and the Australian study involves a combination approach based on individual need we used the Australian intervention and associated costs as the model intervention.

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FOR FURTHER INFORMATION

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ACE-PREVENTION

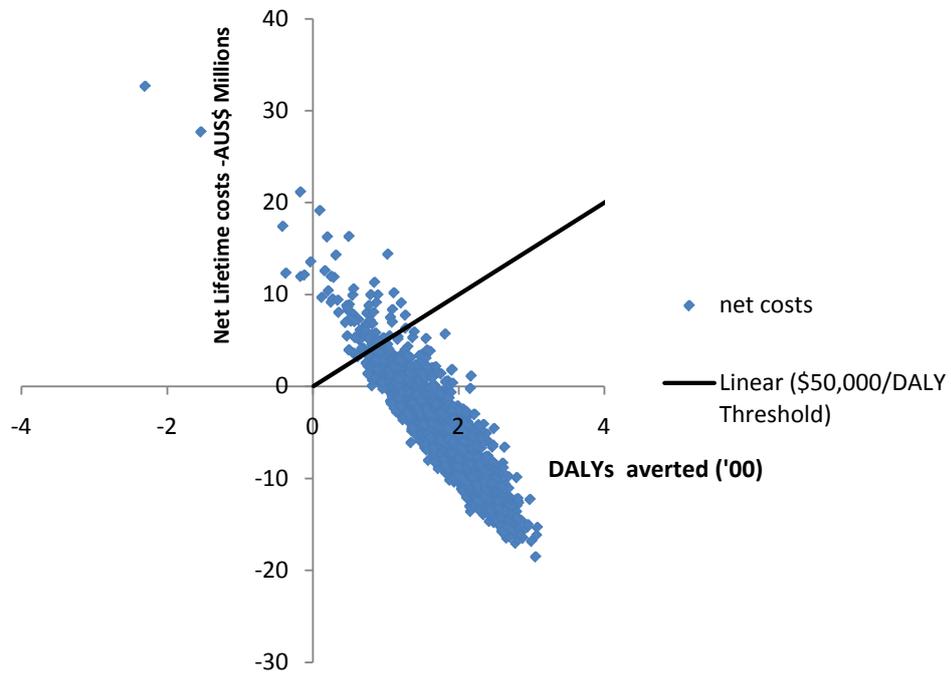
4. CHOICE OF COMPARATOR

The comparator is "treatment as usual" which tends to consist of supportive psychotherapy or monitoring.

5. INTERVENTION COST-EFFECTIVENESS

Treatment of youth at ultra-high risk for psychosis for the prevention of psychotic disorders was found to be very cost-effective, with 96.4% of the iterations (with cost-offsets) being either dominant (cost and health saving) or below the \$50,000/DALY threshold (Figure 1). When no cost-offsets are included, 63% of the iterations fall below the \$50,000/DALY averted threshold.

Figure 1 Cost-effectiveness of prevention of psychotic disorders on a cost-effectiveness plane with \$50,00 per DALY threshold line



6. CONCLUSIONS

An intervention such as the Australian specific intervention for ultra-high risk youth offered through the Australian PACE clinic represents excellent value for money and has the potential to save more resources than what it costs, even if the benefit is a delay to psychosis progression rather than total prevention per se. This is the first study to consider the cost-effectiveness of such interventions.

A major limitation of the current study is that the long-term epidemiology of the cohort of young people eligible for these interventions is not well established.

Other health benefits of such interventions have not been captured by the current analysis – such as the earlier detection of young people with an actual psychotic disorder as well as health benefits to the families and carers of these young people. Furthermore it has been shown that these intervention may even ameliorate psychotic disorders once they become manifest – both in term of clinical outcomes and resource use (Phillips, McGorry et al. 2007). Therefore, there may be even greater savings associated with the treatment of existing psychotic disorders. However, there may be adverse consequences to those unnecessarily treated who would not have gone on to have psychosis – though it must be kept in mind that these youth were referred by a third party for psychological assistance and were already experiencing some psychological distress, regardless of whether they would have gone on to develop psychosis or not – therefore it is unlikely that “extra harm” would be created by such an intervention.

7. REFERENCES

McGorry, P., A. Yung, et al. (2002). “Closing in”: what features predict the onset of first episode psychosis within a high risk group? *The Early Stages of Schizophrenia*. R. Zipursky. Washington, DC, American Psychiatric Press: 2-31.

Phillips, L. J., P. D. McGorry, et al. (2007). “Medium term follow-up of a randomized controlled trial of interventions for young people at ultra high risk of psychosis.” *Schizophrenia Research* 96(1-3): 25-33.

Yung, A. R., P. D. McGorry, et al. (2007). “PACE: a specialised service for young people at risk of psychotic disorders.” *The Medical Journal Of Australia* 187(7 Suppl): S43-S46.

For more information on this topic area, please visit website www.sph.uq.edu.au/bodce-ace-prevention

8. ABOUT ACE-PREVENTION

To aid priority setting in prevention, the Assessing Cost-Effectiveness in Prevention Project (ACE-Prevention) applies standardised evaluation methods to assess the cost-effectiveness of 100 to 150 preventive interventions, taking a health sector perspective. This information is intended to help decision makers move resources from less efficient current practices to more efficient preventive action resulting in greater health gain for the same outlay.



ACE–PREVENTION PAMPHLETS

PAMPHLETS IN THIS SERIES

Methods:

- A. The ACE-Prevention project
- B. ACE approach to priority setting
- C. Key assumptions underlying the economic analysis
- D. Interpretation of ACE-Prevention cost-effectiveness results
- E. Indigenous Health Service Delivery

General population results

1. Adult depression
2. Alcohol
3. Blood pressure and cholesterol lowering
4. Cannabis
5. Cervical cancer screening, Sunsmart and PSA screening
6. Childhood mental disorders
7. Fruit and vegetables
8. HIV
9. Obesity
10. Osteoporosis
11. Physical activity
12. Pre diabetes screening
13. Psychosis
14. Renal replacement therapy, screening and early treatment of chronic kidney disease
15. Salt
16. Suicide prevention
17. Tobacco

Overall results

1. League table
2. Combined effects

Indigenous population results

1. Cardiovascular disease prevention
2. Diabetes prevention
3. Screening and early treatment of chronic kidney disease