Making the economic case for the promotion of mental well-being and the prevention of mental health problems

David McDaid
Ingrid Zechmeister
Reinhold Kilian
Helena Medeiros
Martin Knapp
Brendan Kennelly
and the MHEEN Group
1. Why invest in promotion and prevention?

There are many reasons for promoting positive mental health and for seeking to prevent the emergence of problems in the first place. At the policy-making level the protection of public health, including mental health, lies within the competence of the European Commission (EC); this was evidenced by the EC publication of its widely discussed Green Paper in 2005, and also by being instrumental in helping the World Health Organization bring together all 52 of Europe’s health ministries earlier that same year to endorse an ambitious plan for the region.

At national level mental health has also moved up the political agenda in many European countries in recent years, whether in terms of promoting the general mental well-being of the population or addressing the needs of people who have mental health problems. In particular, the importance of giving children a good start in life and maintaining European competitiveness through a physically and mentally healthy workforce have come to prominence.

At the core of all of this activity remains the desire to improve the quality of life of the population. But decision-makers are also increasingly aware of the economic costs of not acting appropriately or early enough, as well as the potential benefits of improving health and well-being. Today one in four (132 million) Europeans are affected by mental health problems each year, costing every European household more than €2,200 per annum.

These costs fall on many different budgets. For instance, the total economic impact of depression is absolutely dominated by the cost of lost productivity because so many people with depression experience absence from work, premature retirement or long-term unemployment. For example, the total cost of depression in Sweden in 2005 was estimated at €3.5 billion (Sobocki et al 2007) (Figure 1). Similarly, the costs of schizophrenia often fall to a host of budgets, and not just to the health care system; in England in 2005 the total economic impact was estimated to be €10.4 billion, but it was spread very widely (Mangalore and Knapp 2007) (Figure 2).

Figure 1: Costs of depression for adults in Sweden 2005
In addition to these immediate costs, those people with poor mental health are much more likely to have poor physical health compared with the general population (Harris and Barraclough 1998). For instance, the risk of cardiovascular disease may be as much as five times higher in people living with severe depression (Bunker et al 2003).

There have also been European studies highlighting the enormous costs of each completed suicide: €2.04 million in Ireland (Kennelly et al 2005) and €1.88 million in Scotland (McDaid et al 2007). Again these costs are not just related to immediate health system, police or funeral costs, but include lost productivity and the various intangible costs, including the pain and grief experienced by relatives and the lost opportunity for individuals who complete suicide the future opportunities for life experiences (Figure 3).

Figure 2: The costs of schizophrenia in England 2005

![Pie chart showing costs of schizophrenia in England 2005]

Total cost to public purse 2004/05 10.4 billion euros

In addition to these immediate costs, those people with poor mental health are much more likely to have poor physical health compared with the general population (Harris and Barraclough 1998). For instance, the risk of cardiovascular disease may be as much as five times higher in people living with severe depression (Bunker et al 2003).

There have also been European studies highlighting the enormous costs of each completed suicide: €2.04 million in Ireland (Kennelly et al 2005) and €1.88 million in Scotland (McDaid et al 2007). Again these costs are not just related to immediate health system, police or funeral costs, but include lost productivity and the various intangible costs, including the pain and grief experienced by relatives and the lost opportunity for individuals who complete suicide the future opportunities for life experiences (Figure 3).

Figure 3: Average cost per completed suicide, Euros 2005 prices

![Bar chart showing average cost per completed suicide in Ireland and Scotland]

- Intangible
- Lost productivity
- Direct (very small amount)
The potential benefits of early intervention are also highlighted by a number of long-term longitudinal studies which indicate that untreated mental health and behavioural problems in childhood, in particular, can have profound longstanding social and economic consequences in adulthood. These include increased contact with the criminal justice system, reduced levels of employment and often lower salaries when employed, and personal relationship difficulties (Chen et al 2006; Fergusson et al 2005; McCrone et al 2005; Scott et al 2001).

In addition to the prevention of mental health problems which tends to remain the major focus of efforts, there are also economic benefits potentially to be gained from the promotion of mental well-being in the population (Friedli and Parsonage 2007). Positive mental well-being, it has been argued, may help increased life expectancy and also reduce the risk of engaging in harmful activities such as alcohol and substance abuse. One study, for instance, reported that those with the highest levels of positive mental health had lower levels of cardiovascular disease (Keyes 2004).

While even the most optimistic of advocates would never imagine that positive mental well-being can be maximised, or all instances of depression, psychosis or suicide averted, it is surely possible for European societies to promote positive mental well-being and also prevent some of these distressing and often devastating events occurring. Indeed, there is a growing body of literature that provides some (typically short term) evidence on the effectiveness of a range of prevention programmes which address known or at least assumed risk factors for mental disorders (Andrews and Wilkinson 2002; Greenberg et al 2001; Herrman, 2005a; Herrman 2005b; Olds et al 1997; World Health Organization 2004). There is also some evidence on the effectiveness of programmes focussing on the early detection and early intervention for severe mental disorders, particularly depression and schizophrenia (Cuijpers et al 2006; Marshall and Rathbone; 2006, Merry et al., 2004, Neil and Christensen, 2007).

However, in the context of ever-present budget constraints, evidence on effectiveness alone is insufficient for policy making; in addition to knowing what works and in what context, information on the economic costs and consequences of any intervention is required. The substantial impacts of poor mental health that we have highlighted mean that investment in mental health promotion (MHP) and mental disorder prevention (MDP) is potentially a highly cost-effective use of resources. One recent analysis suggested tentatively that effective promotion of well-being and effective prevention of mental health problems might avoid lifetime costs of €116,000 and €232000 for each individual benefiting (Friedli and Parsonage 2006).

This MHEEN policy brief assesses what we know about the cost-effectiveness of MHP and MDP strategies in Europe and elsewhere. We also discuss the extent to which the economic case for promotion and prevention is now an issue within countries, identify barriers to wider activity in this area, and flag up ongoing and future research and related activities to add to our understanding of these issues.

2. Methodology

The MHEEN group undertook a systematic literature review (outlined below) to identify evidence on the cost-effectiveness of MHP and MDP interventions across the life course. This was complemented by a bespoke questionnaire on the use of economic evaluation in this area which was completed by MHEEN members for their respective countries.
Methods for review

The objective of the review was to systematically collate relevant evidence to help address the question as to whether it is worth investing in MHP and MDP interventions from an economic perspective. Full details of the methods are reported elsewhere (Zechmeister et al 2008). In essence, we sought to identify those areas in which economic evaluations have most commonly been used and to report on the economic techniques used. We also looked at the extent to which available economic studies focus solely on the prevention of mental health disorders or also have tried to assess the cost-effectiveness of the promotion of improved mental well-being.

A wide range of health and non-health databases were searched. This was complemented by a hand search of key journals, as well as an internet search for grey literature, including governmental reports and academic working papers. Economic evaluations of mental health promotion or prevention interventions that addressed either mental well-being or mental disorder as an outcome parameter directly (e.g. changes in a measure of happiness or a depression scale) were included. Studies which focused on preventing outcomes specifically recognised as well-known risk factors for future mental disorder were included (e.g. behavioural problems in children), as were papers on suicide prevention (although suicide is not always related to mental health problems). For pragmatic reasons of time and available resources, studies looking at alcohol and drug dependency, as well as those looking at the use of drug therapy as a preventative strategy, were excluded from our analysis.

MHEEN questionnaire on country experiences

In addition to our review of the literature, working in collaboration with the International Mental Health Promotion Action group (IMPHA), MHEEN developed a questionnaire intended to explore issues relating to the economics of mental health promotion and prevention. The focus of the questionnaire, like the literature review, was on interventions that had mental health outcomes as one of their primary objectives. Such interventions could be targeted at individuals right across the life cycle. They can, for instance, include schools-based programmes, parenting programmes, workplace initiatives, initiatives to reduce the social isolation experienced by older people, as well as measures to prevent deliberate self-harm and suicide. Again, while recognising that pharmacological therapy can play an important role in the prevention of adverse events such as suicide, the intention of the questionnaire was to focus on non-pharmaceutical interventions, both within and outside the health sector.

One obvious aim was to identify additional studies looking at the cost-effectiveness of such interventions. The questionnaire also asked if economic evaluation – in addition to evaluations of the effectiveness of promotion and prevention interventions generally (i.e. not just those dealing with mental health) – was a significant policy concern in each country. The questionnaire was also used to get some sense of barriers that exist (if any) that prevent the greater use of economic evaluation for mental health-related promotion and prevention interventions. This included examining what opportunities, if any, there are to increase the use of economic evaluations.

Once finalised, the questionnaire was circulated to all MHEEN country representatives, who in turn were encouraged to liaise with local contacts and networks. This invariably involved much trawling through electronic databases and the ‘grey’ literature of policy, advocacy bodies and corporate documents.
3. What do we know?

Both the literature review and data collected from questionnaires confirm that economic analysis in this area remains rare, but its use is increasing and – where conducted – the results of evaluations are encouraging. Some examples of study findings are highlighted below.

Promoting wellbeing

Perhaps most strikingly, nearly all of the evidence focused on the economic impact of preventive actions rather than on measures to improve mental well-being. This may reflect current challenges in accurately measuring well-being, although instruments to measure this are being developed, including the Warwick-Edinburgh Mental Well-Being Scale (Tennant et al 2007). It might also be indicative of the focus that health systems have until recently placed on the avoidance of ill-health rather than on activities to promote well-being.

There are also many measures which impact on positive well-being that do not figure in conventional economic analysis. Most notably, positive mental well-being may also be affected by general macroeconomic conditions. Fiscal measures to redistribute wealth or schemes to help lift individuals out of poverty, so as to reduce inequalities in society, are likely to promote positive mental well-being, but establishing a direct link between these measures and mental health remains difficult. Macroeconomic and socio-cultural factors such as economic transition and the structure of families can also have impacts on suicide rates, although these can work in different ways in different countries (McDaid & Kennelly 2008).

Many effective lifestyle, diet and exercise interventions to promote physical health and well-being are also available, but only a minority have assessed impacts on mental well-being and virtually none have looked at the economic consequences. One rare exception was the study of an exercise programme for older people in Sheffield, England (Munro et al 2004). Participation in regular exercise classes led to clinically significant improvements in both physical health and mental well-being. In part, this may have been due not only to the exercise per se, but also the social participation element of these classes, which afforded an opportunity for often isolated individuals to meet up with others. Overall the cost per additional quality-adjusted life year (QALY) gained as a result of the programme was €17,172, an amount that is generally considered to be cost-effective in high-income countries.

Early intervention in childhood

The area where most work is available relates to children. This builds on the accumulation of evidence that behavioural and emotional problems in childhood, if not adequately addressed by mental health, education and social work services, can have enormous adverse consequences in adulthood. One example is shown in Figure 4, which shows the additional costs associated with conduct disorder (behavioural problems that reach the diagnostic threshold), conduct problems in school (disruptive behaviour but not enough for diagnosis) compared to children with no behavioural problems. Between the ages of 10 and 27, children with conduct problems or conduct disorder impose much higher costs on society, particularly through criminal behaviour and in their much higher needs for social work services, special education and specialist health care (Scott et al 2001). The authors of this study concluded that low-cost parenting interventions may well prove to be highly cost-effective given these impacts.
Indeed, more recent work in England to analyse group-based parenting interventions suggests that, even if only very modest quality of life benefits can be gained, these interventions have the potential to be highly cost-effective (Dretzke et al 2005). Another study in Wales looked at the cost-effectiveness of a group parenting programme (the Webster-Stratton Incredible Years Basic Parenting Programme). The study reported that short-term improvements in child behaviour were gained at low cost; leading the authors to conclude that the intervention represented good value for money (Edwards et al 2007).

Not all studies are so positive. There are other UK studies that have evaluated the cost-effectiveness of interventions targeted at young parents or mothers having to deal with stressful socioeconomic circumstances. Two programmes to support mothers in deprived London inner-city areas were compared to standard care in terms of maternal and child health (including mental health) and costs (Wiggins et al. 2004). Both interventions were more costly than standard services and did not show any significant impact on primary outcomes. This is similar to a study by McAuley et al. (2004) which evaluated the outcomes and costs of ‘Home-Start support for young families under stress’ in Northern Ireland and southern England. Again, no significant improvements in outcomes were found, but higher costs were incurred by the intervention group.

In contrast to these UK studies, several US studies have reported quite favourable results for early childhood programmes. Most of these studies do not report outcomes for mental well-being as such, but address well-accepted risk factors for mental disorders. Schweinhart et al. (2005) evaluated the monetary net benefits for pre-school support for children with low IQs from families with low socioeconomic status. To do so Schweinhart used effectiveness data from a specific pre-school programme (the well-known Perry Preschool Programme). Compared to the control group, net benefits in a long-term evaluation arose from better school performance, higher income, reduced crime, fewer drug problems and reduced use of anti-depressants. The results could, however, be overestimated as the intervention was described as a pilot programme where the teachers involved were particularly highly motivated, and such conditions might not be replicated more widely.
Lynch (2004) also used the Perry Preschool study, together with three other studies that had similar aims, to calculate the long-term net benefit from the perspective of the taxpayer and the public purse. According to his results, if provided to 20% of all US three- and four-year old children living in poverty, the programmes would result in benefit-cost ratios between €3.42:1 and €7.91:1 depending on the different programmes' effects. Furthermore, he argued that after seventeen years, the net effect on the government's budget from rolling out one of the programmes, Perry Preschool, on a nationwide basis would be positive. Despite this finding, it is difficult to know how far these results can be generalised from a regionally developed and implemented programme to a broader context where educational systems may differ dramatically. Moreover, this programme was developed in the 1960s and may be less appropriate almost fifty years later.

A range of very long-term economic benefits from a variety of intervention programmes for children and young people were also been identified in another US-based review (Aos et al 2004). Almost two-thirds of sixty interventions identified had net benefits. Overall results ranged from a net benefit of €28,000 to net costs of €44,000. The highest net benefits were demonstrated for juvenile offender programmes. Another similar US review of seven early years (under 5s) education, home visiting or parenting interventions also concluded that a range of effective interventions were available (Karoly et al 2005). Five of these studies appeared to be cost effective; those with very long follow up (at age 15 or greater) demonstrated the highest levels of net benefit, being up to six times greater than the costs of the programmes. Benefits were greatest for children from disadvantaged backgrounds. The extent to which these interventions can be adapted to the differing contexts in Europe still needs careful consideration.

Education itself has also been associated with reduced risk of poor mental health and depression (particularly for women) according to analysis of data from the British National Child Development Survey (Chevalier and Feinstein 2006). These authors concluded that, because of the high costs of poor mental health, measures to invest in strengthening educational attainment in children with low levels of educational performance might represent good value for money. On top of these consequences, of course, there would likely be increased productivity of individuals who have a higher level of education.

**Preventing depression**

Several studies have looked at interventions to prevent depression. Smit et al (2006) in the Netherlands evaluated the cost-effectiveness of minimal-contact psychotherapy as a preventive measure for individuals at high risk of depression. At a cost-effectiveness threshold of €20,000 per case avoided, there was a 70% to 80% probability (depending on the costs included) that the intervention would be cost-effective. Additionally, there was a 40% to 60% probability that the intervention would be dominant compared to standard care (i.e. would have better outcomes at a lower cost). However, these calculations were based on findings over a short (one-year) period.

Another study in the Netherlands identified by MHEEN is evaluating the impact of an intervention to reduce the burden of depression in a population of high-risk chronically ill older people, which included both cost-effectiveness and cost-utility analysis. The intervention was a minimal psychological intervention. Initial analysis indicates that there is a 24% probability that this intervention is more effective, but at additional cost, and an 8% probability that the intervention is both less costly and less effective.
In England, Petrou et al. (2006) evaluated a preventive intervention targeted at women who were at high risk of developing postnatal depression. Based on a pragmatic randomised controlled trial they found a non-significant increase in depression-free months, as well as a non-significant increase in health and social care costs in the intervention group. At a willingness-to-pay threshold of €1,500 per prevented month of depression, the probability that the intervention is cost-effective was reported to be 70%. The non-significant nature of effectiveness data meant that this probability did not exceed 80% even at substantially higher willingness-to-pay thresholds.

In the US, Lynch et al. (2005) evaluated the cost-effectiveness of cognitive behaviour therapy for high-risk teenagers with depressive parents over a one-year period. In the year after the intervention, participants reported significantly more depression-free days than the control group (301 versus 248). The authors argued in favour of the intervention based on the fact that cost-effectiveness ratios were within the same range as those for accepted depression treatments in the US, with the reported cost per QALY gained remaining below the widely accepted threshold of €45,000. However, the long-term effects of the intervention were not analysed and the sample was rather small which does not easily allow the results to be generalised.

Valenstein et al. (2001) evaluated alternative strategies of screening for depression among adults in the US. They assumed that screening would increase the diagnosis of depression by 50% for individuals with major depression (from 45% to 68%). Treatment effects of diagnosed depression were then based on a meta-analysis of randomised controlled trials. Compared with no screening, periodic or annual screening of 40-year old adults resulted in rather unfavourable cost-utility ratios (€60,000 to €220,000 per QALY). However, the authors hypothesised that as more effective treatments become available then the cost-effectiveness of screening will in turn improve.

Suicide prevention

Remarkably, despite considerable attention given to suicide in policy discussions across Europe, evidence on the cost-effectiveness of suicide prevention strategies is sparse. Potentially this kind of preventive initiative may be highly cost-effective: work in Scotland suggests that if just 1% of suicides could be avoided then the national programme, with has had an annual investment of more than €7 million, would actually be cost saving (McDaid et al 2006). In England it was also estimated that the National Suicide Prevention Strategy (NSPS), would not be cost-effective but actually cost-saving if a 20% target in reduced suicides was attained. The savings were £700 million (€1billion) from avoidable deaths, and £300 million (€430m) from QALYs gained.

Looking at training interventions, Rutz et al. (1992) conducted a partial cost-benefit analysis in Sweden comparing an educational programme for general practitioners which aimed at preventing suicide via improved treatment of depression with no such intervention. As a proxy to calculating monetary benefits they used suicides prevented. The related numbers of reduced days of sick leave (10,898 days) and lives saved (19), as well as reduced drug costs, resulted in an average net benefit of €31.6 million. However, the results were sensitive to the method of calculating monetary benefits and the assumptions concerning suicides avoided. A more recent economic analysis of the suicide awareness tool STORM (Skills-based Training on Risk Management) in England indicated that a 2.5% decrease in the suicide rate would generate a cost per life year saved of just €5,500, a value considered to be highly cost-effective (Appleby et al. 2000).
Byford et al. (1999) analysed the cost-effectiveness of a home-based social work intervention for children and adolescents that had deliberately poisoned themselves. The programme aimed to reduce suicidal ideation and costs from further service demand. Their study, conducted in England, found no statistically significant differences between intervention and non-intervention groups in terms of outcome and total costs (although the former group had higher intervention costs, these were offset by lower costs for subsequent health and social care service utilisation). According to the authors, the intervention could be considered equally cost-effective as routine care alone; moreover the study adopted a short time frame and may have excluded additional savings which would have made the intervention appear more attractive.

Outside Europe, one of the few examples of the assessment of the cost-effectiveness of an area-wide suicide prevention programme can be seen in the highly specialised setting of a reservation for adolescent Native Americans in the Western Athabaskan tribe in rural New Mexico (Zaloshnja et al 2003). A wide range of interventions were included in the programme, including the use of lay people trained as ‘natural helpers’ to support young people in crisis and notify mental health professionals of the need for assistance. The programme was evaluated by a mirror study comparing the suicide rate of the targeted age group before and after the intervention. The suicide rate of other age groups was used as a quasi-control group. Economic evaluation was conducted by means of cost-benefit and cost-utility analyses, indicating a cost-benefit ratio of €40 per € invested, and a very favourable incremental cost-effectiveness ratio of €514 per QALY gained. The study is somewhat limited by the lack of an appropriate control group and the fact that it was impossible to attribute any change in the suicide rate to a specific element of the programme. The very specific setting and population group for this study also implies that its results may not easily be generalised to other contexts.

Sari et al. (2007) analysed the net benefit of two programmes, general suicide awareness information versus peer-led support programmes for the prevention of suicides in university students in Florida. They applied a simulation model using data on recorded suicides and a meta-analysis, pooling information from several studies to estimate the effectiveness of the two prevention programmes. Based on the estimated effect rates for general education and peer support programmes to prevent suicide (57% and 60% respectively), the authors came to the conclusion that implementing both programmes in all universities in Florida would result in net benefits of €18 million and €27 million respectively, representing benefit-cost ratios of €2:1 and €3.70:1.

Workplace health promotion

Many national governments in recent years have turned their attention to the employment difficulties experienced by people with common mental health problems, including stress and depression, and also encouraging greater awareness among employers as to their workplace responsibilities for promoting better mental wellbeing and reducing worker stress. Evidence is growing on the effectiveness of various workplace-based programmes, both to promote good mental well-being and deal with some of the early signs of stress and mental health problems. There may well be substantial scope for economic benefits such as increased productivity and reduced need to pay disability benefits through investment in the workplace. But there are major caveats to bear in mind: most evidence comes from the US and is often generated by companies, and not subject to rigorous peer-review. Nevertheless, there are some tantalisingly interesting insights.

A recent survey in England by the Chartered Institute of Personnel and Development (2007)
found that 42% of employers assert that they are developing schemes to protect mental health, acknowledging that this, in addition to the obvious health benefits, can help improve their companies’ economic performance. For example, evaluation of London Underground’s stress-reduction programme for all 13,000 of its employees suggests that there was a reduction in absenteeism costs of €705,000 in its first two years. This is eight times greater than the cost of the scheme. In addition, improved productivity and some positive healthy lifestyle changes were observed (Business in the Community, 2005). One stress management programme in a Belgian pharmaceutical company achieved a reduction in absenteeism of just 1%, but still avoided costs of €600,000 because the economic impact of stress-related absenteeism was so substantial (Polemans et al., 1999).

Electricité de France and Gaz de France have implemented the APRAND programme (Action de Prévention des Rechutes des troubles Anxieux et Dépressifs) for their 140,000 employees. The aim is the early identification of anxiety and depressive disorders by company occupational health physicians, as well as by primary care doctors and social workers. Results indicate that, of those workers on long-term sick leave identified as having anxiety or depressive disorders, the cohort that subsequently participated in additional preventative activities had an increased 10% to 20% probability of recovery or remission at twelve months, compared with those who received usual care alone. Work is now planned to determine the impact of this intervention on absenteeism rates and thus economic performance (Godard et al. 2006).

Mental health promoting interventions can also be cost-effective in helping those who are out of work and thus at greater risk of developing mental health problems. One US programme, designed to help individuals take more control when seeking employment and cope with difficulties and disappointments, both increased reemployment and generated a positive return on investment (Vinokur et al 1991). It has subsequently been implemented to varying degrees and with some success elsewhere, including Finland, the Netherlands and Ireland.

### 4. Ongoing and future evaluations

Although the importance of, and need for, economic evaluations of promotion and prevention strategies is acknowledged, to date this has not been translated into a substantial number of ongoing or future evaluations. Nonetheless some MHEEN country partners could identify some ongoing or future work, with much of the activity taking place in the Netherlands, a country with a long tradition of looking at the prevention of mental health problems. Five ongoing evaluations that all include an economic evaluation can be identified (Box 1).

<table>
<thead>
<tr>
<th>Box 1: Ongoing economic evaluations of mental disorder prevention interventions in the Netherlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Cost-effectiveness of a cognitive group prevention module for recurrent depression.</td>
</tr>
<tr>
<td>3. Cost-effectiveness of looking for meaning, a life-review course for elderly with depressive symptoms; a randomised controlled trial.</td>
</tr>
<tr>
<td>5. Cost-effectiveness of strategies to prevention of depression and anxiety in high risk residents of long stay homes for older people</td>
</tr>
</tbody>
</table>
In England, the National Institute for Health and Clinical Excellence (NICE), which recently expanded its scope to consider public health and health promoting interventions, is currently reviewing the economic case for the promotion of mental well-being in a number of areas including early years, schools, the workplace and for older people. The results of these deliberations should lead to the publication of recommendations on actions in 2008. In addition, psychological treatment centres, intended to help reduce/avoid mental future mental health problems in people who are currently unable to work because of poor mental health, are also the subject of economic evaluation.

The UK Office of Science and Innovation’s Foresight programme is focusing on identifying and addressing future challenges linked to mental capital and well-being: lifelong learning, mental health, well-being and work, learning difficulties, mental capital through life. Eighty reviews have been commissioned to inform this analysis with findings due for launch in summer 2008.

Elsewhere, some interventions that have been evaluated have been targeted at the secondary prevention of problems in those already identified as having mental health problems, including an ongoing evaluation in Denmark of an Assertive Community Treatment (ACT) model, implemented in an outreach care team for adolescents with a first time psychosis.

In Finland, a randomised controlled study (the ‘Kenkä’ project) is looking at the cost-effectiveness of early rehabilitation for depression. Again, one of the objectives here is to reduce the chances of poor health and employment outcomes in future. Thus the project aims to examine if it is possible, with the help of early intervention programmes, to maintain working ability in individuals in an acute phase of depression. Follow-up will occur at one year, and groups of individuals with or without the intervention will be compared in terms of symptoms of depression and working ability. The incremental effectiveness in terms of maintaining and recurring working ability, as compared to present practice, will be analysed, as well as incremental costs and cost-effectiveness.

Although we have not focused on substance abuse in our analysis, many individuals with substance abuse problems also have mental health problems. In Germany a study is currently underway to look at drug prevention programmes in the Turkish and Russian immigrant populations. Turkish and Russian lay health advisors will offer road shows on drug prevention topics to men and women aged between 16 and 64. The comparative costs of this active educational approach and more passive information strategies will be assessed and so estimates will be obtained of the cost per targeted person who is reached.

Another area where quite a lot of evaluation is now underway is in the workplace. In Malta, as a first step, the cost of absence from work due to mental health problems will be assessed in all 3000 employees of the SG Thompson Micro Electronics Company. The study aims to assess the economic burden of mental illness and if the economic burden is a significant cost to industry, the researchers will commence discussions with key stakeholders to implement mental health promotion/prevention and early intervention programmes in the workplace.

Scoping work focusing on the workplace is also planned in Portugal as part of a European project. A pilot study will look at the Mental Health Impact Assessment (MHIA) of non-health policies, within a chosen public policy domain (employment). It aims to develop a tool to inform the multiple mental health and systems impacts of working conditions and labour policies and strategies. It will focus on the psychosocial aspects of the work environment and on the specific mental health promotion programmes and policies to be implemented in the workplace. This project will also attempt to assess the cost-effectiveness of programmes and to develop
adequate (mental) health information systems.

Elsewhere, while there are some policy documents that point to the importance of determining the cost-effectiveness of promotion and prevention interventions, these have not yet been turned into programmes or evaluations. One example is Bulgaria, where the national programme on mental health mentions the importance of the cost-effectiveness of any mental health-orientated activity, but no steps have been taken towards implementation. In Lithuania, the Public Health Strategy for 2006-2013 and the Implementation Activities for 2006-2008 both stress that insufficient financing is a threat to public health improvements, and state that one of the tasks is the evaluation of the efficiency of public health programmes. There are also policy documents that note that efficient and cost-effective mental health prevention programmes should be recognised as a high priority in the Mental Health Strategy for 2005-2010 (a draft under Parliamentary consideration). In addition, according to a decree by the Minister of Health adopted in April 2003, Territorial Patients Funds (TPF) are responsible for undertaking economic evaluations, but to date the TPF has not undertaken this role and nor have any public funds been made available.

5. Where next?

Our Europe-wide review and analysis indicates that the economic evidence base for mental health promotion and prevention is still very limited, but encouragingly there appears to have been a recent increase in the importance attached to assessing both the costs and consequences of different promotion/prevention interventions. Where economic evaluations have already been completed, the economic case for intervention is generally very strong. More evaluations are now underway.

One area where more EU-level work is needed is in relation the workplace. Policy makers may wish to consider providing financial support for the evaluation of workplace-based mental health interventions given the impact of poor mental health on social welfare systems. More partnership work between employers in the private and public sectors is also well merited; indeed the highest levels of workplace stress may well appear in public sector organisations. Much of the work to date in this area has focused on large, often multi-national corporations. Demonstrating the economic case may also help persuade policy makers of the case for providing financial incentives to encourage small and medium-sized enterprises which otherwise might not have the resource to invest in effective workplace mental health-promoting interventions.

Overall, it remains the case that much of the available evidence base on promotion and prevention is from the United States where the context may be very different; caution must therefore be exercised in generalising the results of US-based studies and there is an urgent need to undertake more European assessments. One priority clearly should be to incorporate economics into prospective evaluations. Other complementary (and potentially lower cost) approaches, which MHEEN is taking forward, are to adapt US studies to differing European contexts and, secondly, to look retrospectively at the economic implications of interventions already demonstrated to be effective. There is now a quite substantial evidence base on what is known to be effective (e.g. Jane-Llopis et al 2003; Herrman et al 2005); by estimating the costs of implementation and the economic consequences of reducing or avoiding mental health problems and promoting mental well-being it should be possible significantly to add to what is known, and to provide clear guidance for decision-makers.
Making the economic case for the promotion of mental well-being and the prevention of mental health problems

References


Making the economic case for the promotion of mental well-being and the prevention of mental health problems


Making the economic case for the promotion of mental well-being and the prevention of mental health problems


Making the economic case for the promotion of mental well-being and the prevention of mental health problems


About the authors

David McDaid is Research Fellow in Health Policy and Health Economics in the Personal Social Services Research Unit and the European Observatory on Health Systems and Policies at the London School of Economics and Political Science. David’s research activities focus on mental health policy predominantly, but not exclusively, in Europe. Recent research has included evaluation of the first phase of the National Suicide Prevention Strategy in Scotland, the UK-wide Healthy Living Centre Initiative, and undertaking a review of the extent to which economic evaluations have been used in public health for the Welsh Assembly Government. He has also co-authored a recent report on the Irish health care system. Other areas of current research include looking at ways of translating economic research evidence, particularly from health technology assessment, into policy and practice, valuing informal care, and in examining how economic evaluation and costing methods used in the area of health can be used in other more complex areas of social welfare, particularly related to health promotion and public health.

He has published more than 40 peer-reviewed papers, largely on the use of economics in policy making and on mental health policy. He has acted as a consultant to a variety of governments, public and voluntary agencies including the World Health Organisation, the European Commission and Amnesty International. He is co-editor of the recently published book Mental Health Policy and Practice Across Europe, editor of Eurohealth http://www.lse.ac.uk/collections/LSEHealth/documents/eurohealth.htm, associate editor of Health Policy, co-covenor of the joint Campbell/Cochrane Collaboration Economic Methods Group and a director of the Health Equity Network http://www.lse.ac.uk/collections/LSEHealth/researchNetworks.htm.

Ingrid Zechmeister has been involved in the area of health technology assessment with focus on health economics since 2005 at the Ludwig Boltzmann Institute of Health Technology Assessment in Austria. Ingrid has several years of practical experience in the area of ultrasound sonography at the Department of Gynaecology/Vienna General Hospital, completed an MA in Health Studies and Management (University of Brighton) and moved to research in the field of (mental) health economics and health policy. She has conducted several research projects at the Institute of Social Policy/Vienna University of Economics where she also completed her doctoral studies. Additionally, she has been involved in teaching activities since 2003.

Reinhold Kilian is a senior lecturer on health economics and medical sociology and the head of the unit of mental health services research at the Department of Psychiatry II at the University of Ulm, Germany. His research activities include the evaluation of mental health service interventions, the examination of economic and sociological aspects of mental disorder and mental health promotion, and the development of methods for cost- and outcome assessment in mental health services. Reinhold Kilian conducted several research projects on the evaluation of mental health services systems for people with schizophrenia and he is a member of several international research groups in the field of mental health economics and outcome assessment. Recent research activities focus on the promotion physical health in people with severe mental illness, on problems of family planning in young females with mental disorder, the examination of involuntary admission practice and the development of an instrument for the assessment of empowerment as an outcome of mental health interventions. Since 2006 he is also president of the Research Committee 49, Sociology of Mental Health and Illness of the International Sociological Association. Reinhold Kilian published about 60 peer reviewed articles and numerous book chapters.
Helena Medeiros is a Research Officer within PSSRU. Helena has a BA from the University of Toronto and an MSc in Health Policy, Planning and Finance from the London School of Hygiene and Tropical Medicine and the London School of Economics. Helena's main area of interest is on mental health and deinstitutionalisation. She is currently working on the MHEEN (Mental Health Economics European Network) project.

Martin Knapp is Professor of Social Policy and Director of the Personal Social Services Research Unit at the London School of Economics and Political Science in the UK. He also holds the position of Professor of Health Economics and Director of the Centre for the Economics of Mental Health at King’s College London, Institute of Psychiatry. In addition he has an Honorary Professor at universities in Hong Kong and the Czech Republic. Martin's research activities are primarily in the mental health, long-term care and social care fields, focusing particularly on policy analysis and economic aspects of practice. He has been an advisor to many government departments and other bodies in the UK and elsewhere, and to international bodies such as the European Commission and World Health Organization. His publications include about 300 peer-reviewed journal articles, about 140 book chapters, 15 books, 4 edited books, and numerous monographs.

Brendan Kennelly studied economics at University College, Cork and at the University of Maryland, College Park. He has been a lecturer at NUI Galway since 1991. He has been Head of Department since February 2005. Much of his recent research has been in health economics. He is currently involved in a large research project on the Economics of Mental Health in Ireland. This project is financed by the Mental Health Commission, Ireland. He has recently completed a report for the National Suicide Research Group on the Economic Cost of Suicide in Ireland. He is also writing a paper with Eoghan Garvey and Eamon O’Shea on the socioeconomic determinants of suicide rates over time and across countries.

About MHEEN

The Mental Health Economics European Network (MHEEN I) was established in 2002 with 17 and extended in 2004 to 32 countries. The Network is coordinated by the PSSRU at the London School of Economics and Political Science and Mental Health Europe, based in Brussels, and supported with funding from the European Commission. For further information about the Network visit the MHEEN website at www.mheen.org.

The Group comprises the following partners: Martin Knapp, David McDaid, Helena Medeiros (London School of Economics, United Kingdom); Mary Van Dievel, John Henderson, Mari Fresu (Mental Health Europe, Brussels); Ingrid Zechmeister (Austria); Ronny Bruffaerts (Belgium); Hristo Dimitrov (Bulgaria); Anna Anastasiou (Cyprus); Petr Hava (Czech Republic); Taavi Lai (Estonia); Pekka Rissanen (Finland); Jean-Pierre Lépine (France); Reinhold Kilian (Germany); Athanassios Constantopoulos (Greece); Judit Simon (Hungary); Kristinn Tómasson (Iceland); Brendan Kennelly, Eamon O’Shea (Ireland); Francesco Amaddeo (Italy); Liubove Murauskiene (Lithuania); Kasia Jurczak (Luxembourg); Ray Xerry (Malta); Silvia Evers (Netherlands); Vidar Halsteinli, Solveig Ose (Norway); Katarzyna Prot-Klinger (Poland); Mónica Oliveira (Portugal); Raluca Nica (Romania); Pětr Nawka (Slovakia); Mojca Dernovsek (Slovenia); Luis Salvador-Carulla (Spain); Jenny Berg, Linus Jonsson (Sweden); Matthias Jaeger (Switzerland); Mehtap Tatar (Turkey); Sonia Johnson, Giuseppe Tibaldi, Tomasz Adamowski, Luis Salvador-Carulla, Torleif Ruud, Thomas Kallert, Petr Nawka (ESMS - European Service Mapping Schedule Network); Karl Kuhn (ENWHP – European Network for Workplace Health Promotion); Eva Jané-Llopis (IMHPA – Implementing Mental Health Promotion Action); Heinz Katschnig, Graham Meadows, Julien Mouques (Expert Advisers).