

Economics, mental health and policy: An overview

Report summarising findings presented at a MHEEN seminar (London, September 2007) and MHEEN symposium (Brussels, December 2007)

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Executive summary

Mental health has moved up the political agenda in many European countries in recent years, whether in terms of promoting the general mental wellbeing of the population, or addressing the needs of people who have a mental illness. These range from concerns over human rights abuses; the need to rebalance community and institutional care; the challenges of coordinating activity across multiple sectors; the search for effective treatments and support services; the huge and endemic problems of stigma and discrimination; and the question of how to prevent mental health problems arising in the first place and promote wellbeing;

None of these concerns is 'economic' in the narrow sense, but any actions taken to address them will have economic implications. Increasingly, therefore, politicians, managers, and care professionals across Europe have been seeking economic evidence and insights to inform and support their decisions. It is against this background that the Mental Health Economics European Network, established in 2002, has been undertaking comparative analysis and collating data, initially across seventeen, and now thirty-two European countries.

This briefing paper provides an overview of work undertaken during the second phase of MHEEN from 2005 to 2007. We highlight issues relating to the funding of mental health; assess the merits of the economic case for investment in promotion and prevention; look at how economic incentives might be used to influence the balance of care; reflect on some of the implications of poor mental health for employment and productivity, focus on further development of the European Service Mapping Schedule and, as an example, consider the challenges to be faced in two European countries (Turkey and Hungary) currently undergoing rapid economic and social transition.

Introduction

Mental health problems have placed major burdens on health care systems across Europe and thus the topic has become increasingly prominent in policy matters. Poor mental health extracts a heavy toll from individuals, families, communities, and society. The challenge of moving away from outdated institutionalised settings to a system of community-based care remains at the forefront of policy in several countries, both in terms of better management in the old EU countries and in implementation in the new Member States. While many associated issues may not look specifically 'economic', poor mental health clearly can have adverse effects on productivity and participation in the labour force, while the costs of care inevitably strain financial resources. Policy makers, therefore, must address economic issues within the context of mental health.

The Mental Health Economics European Network (MHEEN), having recently completed its second phase, was set up with the intention of supporting and building a base of expertise to consider how economic issues can inform policy with regard to cost-effectiveness, thus guiding future initiatives whilst allowing current activities to be scaled up and more appropriately tailored to country-specific needs. MHEEN seeks to analyse a number of central policy issues in mental health: the financing of mental health systems; economic barriers in the way of a better balance between institutional and community-based care; the economic case for promoting mental health and wellbeing; and the mapping of patterns of service utilisation and costs of mental health services in small geographical areas. A broader MHEEN aim was to build mental health economics capacity across Europe.

Mental health and economics in Europe

Mental health has moved up the political agenda in many European countries in recent years, whether in terms of promoting the general mental wellbeing of the population or addressing the needs of people who have a mental illness. The European Commission has added its weight to this trend with publication of its widely discussed Green Paper in 2005, and – with the World Health Organization – was instrumental in bringing together all 52 of Europe’s health ministries earlier that same year to endorse an ambitious plan for the region.

Common concerns

European countries share common concerns. Among the most prevalent are:

- human rights abuses;
- the continued reliance in many countries on the old and discredited asylums;
- the difficulties of developing good community-based care to replace them;
- the perennial and controversial issue of compulsory treatment;
- the challenge of coordinating activity across health, social care, housing, criminal justice, employment and other systems;
- the search for effective treatments and support services;
- the question of how to promote mental wellbeing and prevent mental health problems arising in the first place; and
- the huge problems of stigma and discrimination.

None of these concerns is specifically ‘economic’, but any actions taken to address them will inevitably have economic implications. Increasingly, therefore, politicians, managers, and care professionals across Europe have been seeking economic evidence and insights to inform and support their decisions.

Demands for economics

What are they looking for? What are the ‘demands’ or needs for economics in the mental health field?

Some needs relate to the costs of mental health problems and the service responses to them – often following recognition that many mental health problems generate substantial and wide-ranging costs that fall on various agency budgets and also hit the pockets of individuals and families. Decision makers want to know if expenditure on treatment strategies might later be compensated by reductions in support costs, or how these compare with the future costs of inaction. New drugs invariably look more expensive than old drugs, and delivering psychological therapy to more people requires more staff to be appointed, so questions are inevitably asked about whether such expenditure is ‘worth it’. Decision makers also want to know whether spending more money in the mental health area represents a better investment in health improvement and quality of life enhancement than, say, spending the same amount on cancer services or other health promoting activities. In other words, they are interested in cost-effectiveness.

There are other demands for economic information – for example, about how best to pay for

mental health services to ensure fair access. This is an especially challenging topic given that long-term mental illness can impoverish someone, leaving them unable to afford to pay for their own treatment. There is the related question of equity, and how to design resource allocation arrangements to support the most vulnerable people in a society.

Economic data can help to smooth the often-difficult process of agreeing joint action between different government departments or other bodies, given that mental health problems can have such wide-ranging impacts. Nowadays, there is better awareness in some countries of the interconnections between mental health problems, employment and social exclusion, and hence growing mutual interest among government ministries responsible for employment, social security, and finance.

Finally, there is the question of economic incentives and whether they can influence the behaviour of key individuals and organisations so as to encourage them to pay more attention to mental health needs.

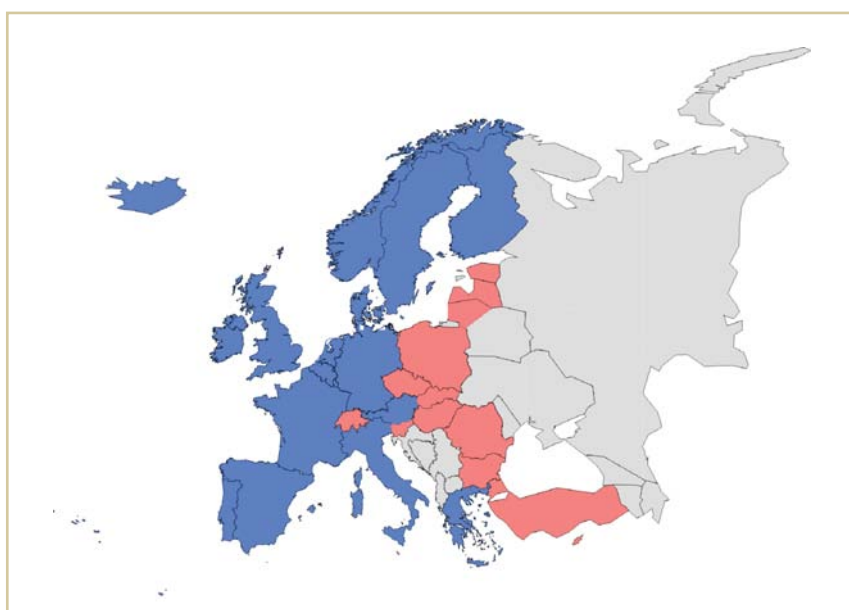
Supplying the answers

These are just some of the questions posed by decision makers that have an economic flavour, but not many answers have been forthcoming. The supply of economic insights and evidence has been very limited across most of Europe – indeed, this is a worldwide phenomenon. This is one reason why the Mental Health Economics European Network (MHEEN) was set up – to support the development of economics expertise and awareness in the mental health field.

3. MHEEN – Aims

The broad aim of MHEEN when it was first launched (with funding from DG Health and Consumer Protection of the European Commission) was to build a base for mental health economics information and subsequent work. Initially, when work started in 2002, the Network comprised 17 countries (shaded blue in Figure 1), and the second phase of MHEEN (which began in 2005) saw expansion to 32 countries (shaded red).

Figure 1:
MHEEN Network



Coordination of MHEEN has always been the joint responsibility of the Personal Social Services Research Unit at the London School of Economics and Political Science (www.pssru.ac.uk) and the Brussels-based non-governmental organisation Mental Health Europe/Santé Mentale Europe (www.mhe-sme.org). The first task was simple to state but surprisingly difficult to achieve: to build a network of representatives – at least one per country – with expertise and/or experience of health economics and with personal work or commitment to the application of economics in the mental health context. Network members are listed in Appendix 1.

In the first phase (2002–2004), the aims for MHEEN were to develop frameworks and connections that would allow relevant economic data to be identified and collected across the 17 countries. It was hoped that information and indicators could be pooled and compared to improve understanding of how mental health systems might be developed. In particular, members of the Network were asked to address the following questions:

- 1 How are mental health systems *financed*, not just in the health care field but more broadly?
- 2 What levels of *public expenditure* are committed to mental health services?
- 3 What are the *unit costs* of some key services?
- 4 What is known on the links between *employment* problems and mental health?
- 5 What is known about the *cost-effectiveness* of various mental health treatments and how well developed is the local capacity to conduct economic evaluations?

In the second phase (2005–2007), and following expansion to a larger group of countries, the overarching aim remained the same, but the specific topics changed slightly:

- 6 Again, how are mental health systems *financed*, and how much *public expenditure* is committed to the area?
- 7 What are the barriers and incentives to improve mental health care, with a particular focus on the *balance of care* (and especially the reliance on institutional models of care) and *employment*?
- 8 What mechanisms and strategies are in place for *mental health promotion* and to prevent the onset of mental health-related problems, and particularly what is known about the cost-effectiveness of such strategies?
- 9 Can the *European Service Mapping Schedule* – which was developed a few years ago – be refined so as to assess mental health service utilisation and costs within small catchment areas?
- 10 Finally, there was a commitment to continue to *build capacity* across Europe in mental health economics.

Financing mental health systems

In the first phase of MHEEN, we devoted quite a bit of effort to gaining a better collective understanding of how mental health services are financed. Two papers in a recent issue of the *Journal of Mental Health* – which was devoted to MHEEN – describe the details of health care

financing (Knapp et al 2007) and the increasingly important role of social care (McDaid et al 2007a). In the second phase of our work programme, we again looked at these and related issues and some findings can be summarised here.

What public expenditure commitment is made to mental health?

Do services and initiatives that aim to meet mental health needs get their fair share of available health system funding? When we look across the countries of the Network, mental health care generally looks to be considerably under-funded. Despite the high prevalence, substantial contribution to the global burden of disability, strong association between deprivation and mental illness, and the growing body of cost-effectiveness evidence, the proportion of total public expenditure allocated to mental health care is often tiny (see Figure 2). Caution must be used in interpreting this data as greater levels of expenditure do not always mean better quality care. This is especially true if available resources are tied up in old style institutions, which is still the case in many European countries in particular in Central and Eastern Europe. In addition, the relative position of many countries is less favourable when we look at the proportion of GDP spent on mental health. Such is the case of Romania where 6.50% of the health budget is spent on mental health but as a percentage of GDP, this only amounts to 0.26%.

Figure 2: Percentage of total public expenditure on health spent on mental health

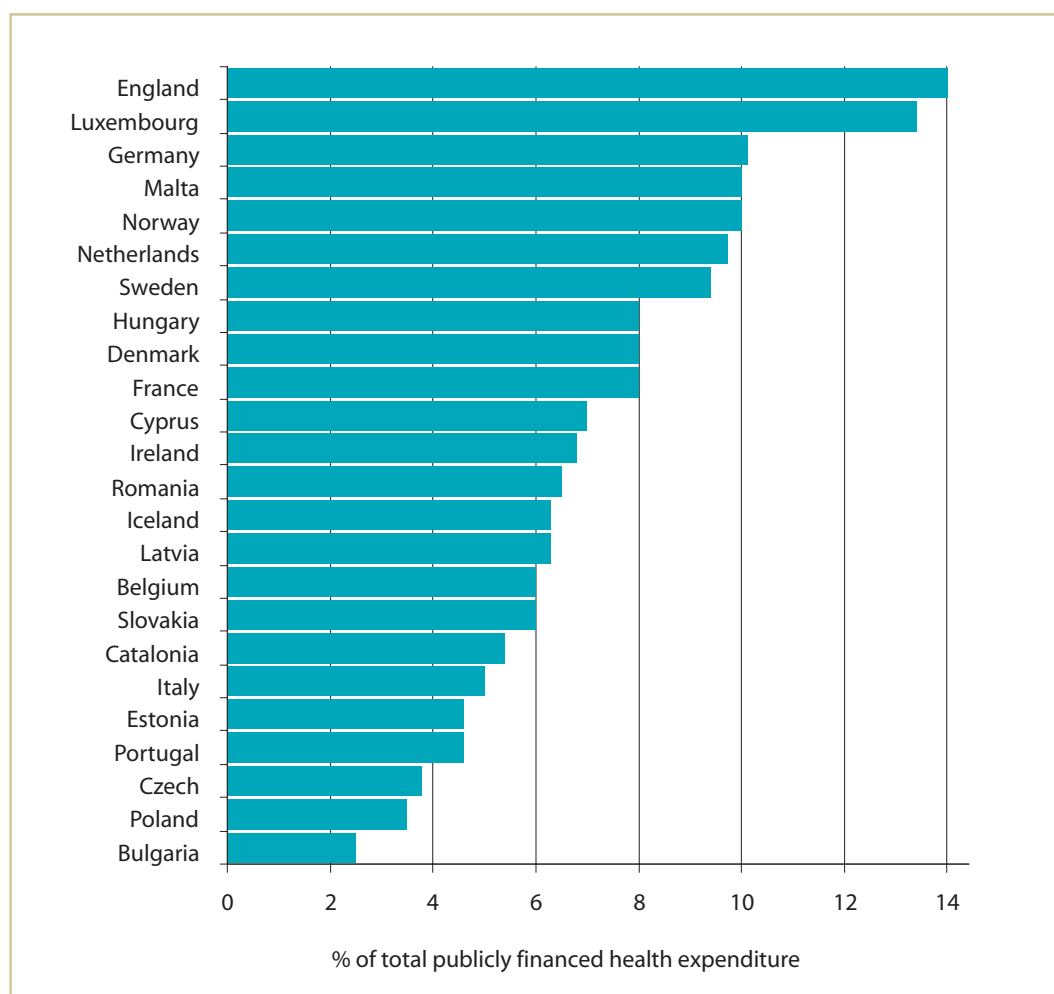
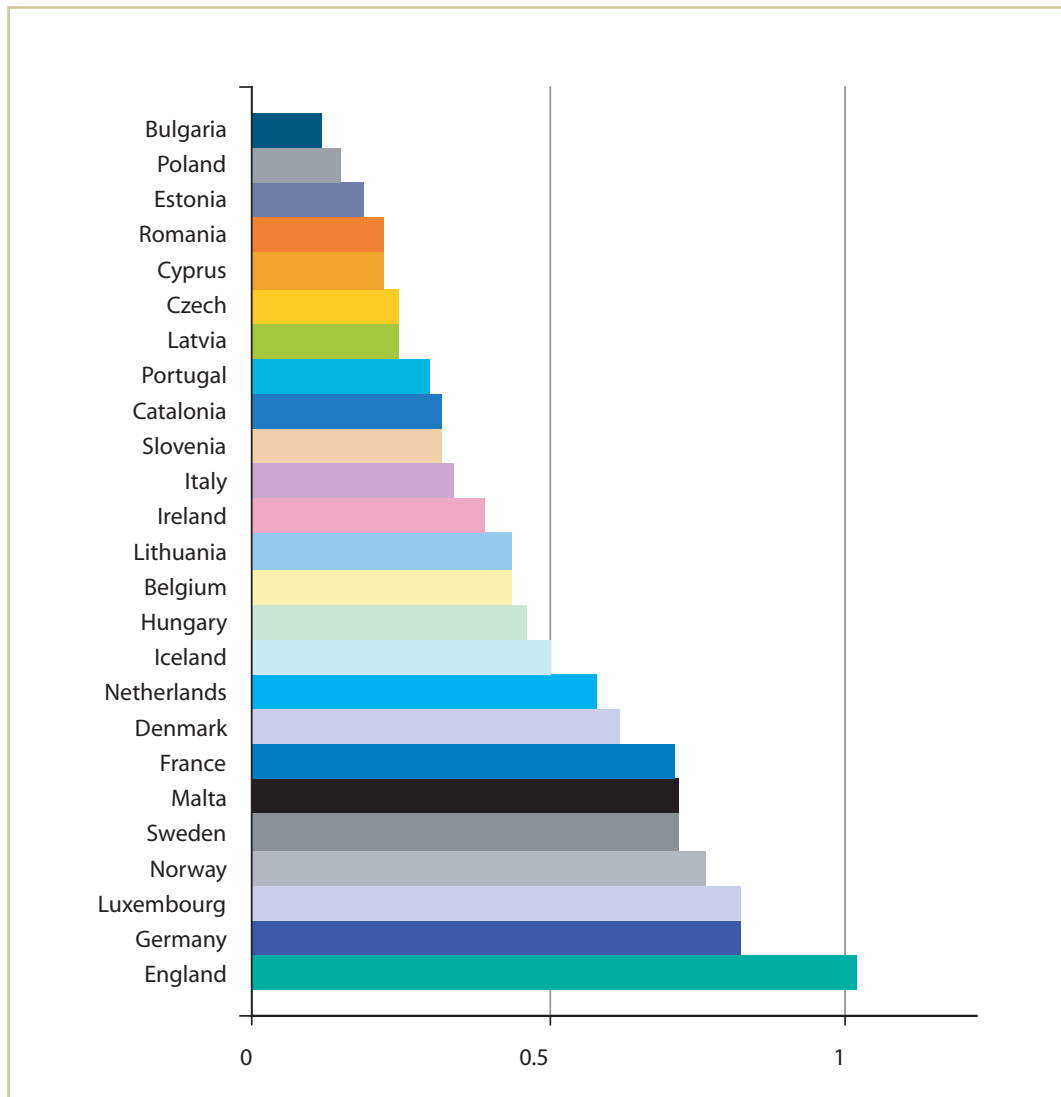


Figure 3: Percentage of GDP accounted for by public expenditure on mental health



More generally, this commitment also looks small when seen as a proportion of GDP (see Figure 3). Only five countries spent more than 10% of their health budget on mental health, and only four countries committed as much as 0.75% of GDP. We need to be a little cautious about these figures because it is difficult to make robust comparisons between countries when accounting procedures differ, and particularly when the boundaries around what is a 'health service' can be drawn in different ways. Nevertheless, the differences across Europe are stark.

Our cautionary remark has added significance because it has been quite common across Europe for the boundaries between health, social care and other service systems to be shifted (McDaid et al. 2007a). This has been partly a response to the shifting balance of care away from institutions and towards systems that are more community-focused (see section 5 below). Moving the locus of care to the community creates many new and broadly welcome opportunities, but also raises challenges, including the difficulties of coordinating services across organisational and budgetary boundaries, and different eligibility criteria for support and for exemptions from payment.

How are mental health services funded?

The routes for funding mental health care in Western Europe do not differ much between countries. Funding relies largely on taxation or social insurance, respecting long-held principles of solidarity and universality. However, this does not necessarily mean that such systems operate equitably. Systems where there is higher reliance on out-of-pocket payments at the point of need (such as in Portugal) are likely to be more inequitable. Out-of-pocket payments may be particularly inappropriate for people with mental health problems, who may already be unwilling to come into contact with services because of fears of being stigmatised, and who may already be disadvantaged economically by the consequences of chronic illness.

Supplemental voluntary insurance (often-called private insurance) continues to play a minimal role in providing coverage for mental health services in most Western European countries, but its role is more significant in Eastern Europe. Evidence from the US, where the private health insurance market is most well developed, illustrates the difficulty that mental health can have in achieving parity with physical health, leading to unequal access to insurance coverage for mental health treatment. Of course, as responsibilities shift out of the health system and into the social care system, for example, financing difficulties might arise because there might not be the same commitment to the principles of universality and solidarity – means testing is more common, for instance.

How are resources allocated?

With few exceptions across MHEEN countries that employ tax-based financing systems, annual budgets tend to be determined through some combination of historical precedent and political preference. Few countries report having an allocation mechanism objectively based on measures of population health needs. One consequence is that resources are unlikely to be well targeted on areas where they have the greatest chance of being effective or where they can tackle inequities. Even when budgets are supposedly earmarked for mental health services, there are few safeguards in some countries to ensure that resources do not in fact 'leak away' to non-mental health services.

One possible way to improve the allocation of resources is through the use of tariffs linked to specific procedures or needs, such as diagnosis-related groups (DRGs). These tariffs reimburse providers of mental health services – in both social insurance and tax-dominated countries – on the basis of some pre-set amount. But using DRGs has generated some difficulties: DRG tariffs have not always taken full account of the costs associated with chronic mental health problems.

Promoting positive mental health

Resources are always limited relative to needs, which is where information on cost-effectiveness can usefully inform resource allocation processes. The aim is to help the people who have to take decisions make more efficient use of available budgets and services, while also pursuing other objectives such as equity and human rights. Although there are quite marked differences between countries, it is broadly the case that much more attention is now being focused on the cost-effectiveness of treatments. In contrast, although policy documents increasingly include some focus on promoting mental well-being and preventing the onset of mental disorders, there have been few attempts to synthesise what is known about the cost-effectiveness of strategies to promote positive mental health or reduce the risk of suicide.

Working jointly with the International Mental Health Promotion Action (IMPHA) group, MHEEN partners have been trawling through electronic databases and the 'grey' literature of policy, advocacy bodies, and corporate documents to find out just what is known about the cost-effectiveness of such initiatives. This has complemented a systematic literature review undertaken by MHEEN ranging over many areas, including schools, workplaces, primary health care settings, and the community (Zechmeister et al., 2008). The primary focus was on European studies, but we have also been examining good evidence from elsewhere. In each case, our interest has been focused on cost-effectiveness.

What is the cost of not acting early enough?

There are many reasons for promoting positive mental health and for seeking to prevent the emergence of problems in the first place. At the core of all of those reasons is the desire to improve the quality of life of a population. But decision makers are also very aware of the costs of not acting appropriately or early enough. For example, the total cost of depression in Sweden in 2005 was estimated at €3.5 billion (Sobocki et al 2007) while the cost of schizophrenia in England in the same year was estimated at €10.4 billion (Mangalore and Knapp 2007).

There have been studies which have pointed to the costs of each completed suicide: €2.04 million in Ireland, and €1.88 million in Scotland (Kennelly et al 2005; McDaid et al 2007b). Each of these – and many other examples could have been given – is a substantial amount. While even the most optimistic of advocates would never imagine that all instances of depression could be prevented, or all psychoses avoided, or all suicides averted, it is surely possible for European societies to prevent some of these distressing and often devastating events occurring.

Within the total costs just noted, a familiar pattern across Europe is the contribution of many different budgets. As Figure 4 shows, the contribution of health care costs to the total economic impact of depression in Sweden is absolutely dwarfed by the cost of lost productivity because so many people with depression experience absences from work or long-term unemployment.

Figure 4: Cost of depression in Sweden

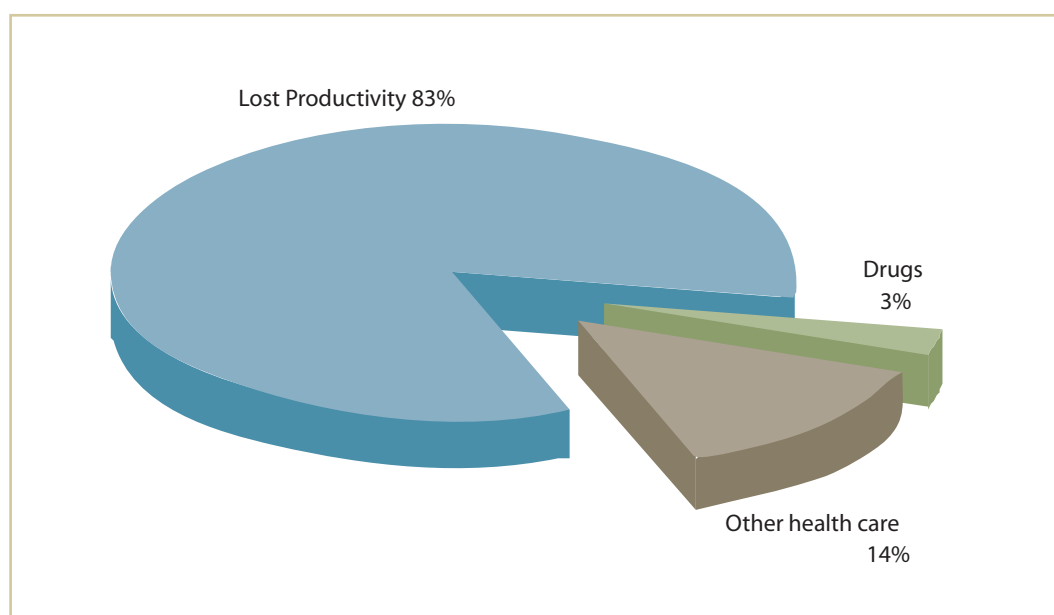
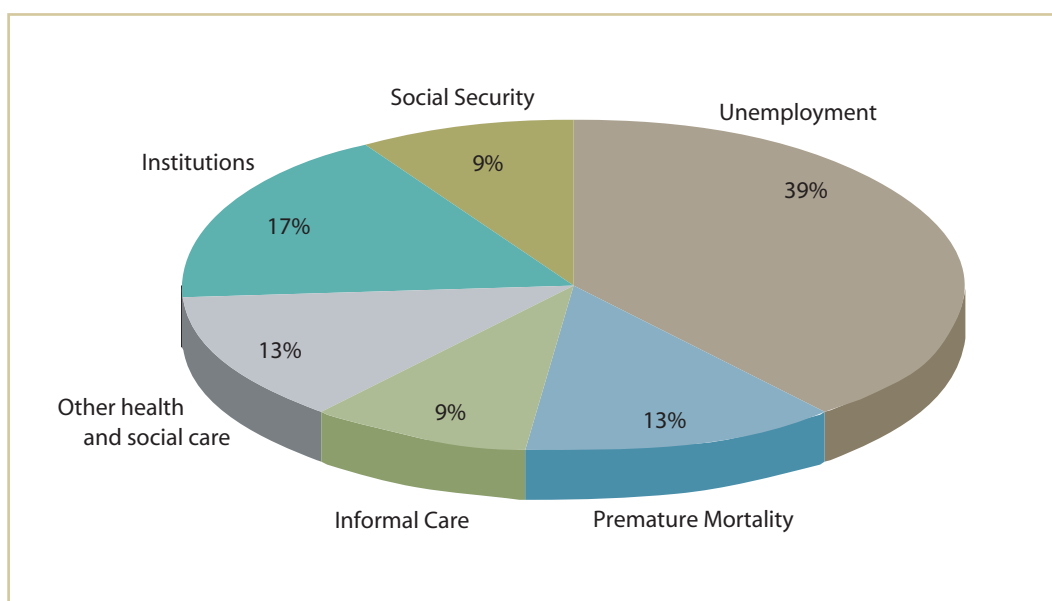


Figure 5: Cost of schizophrenia in England



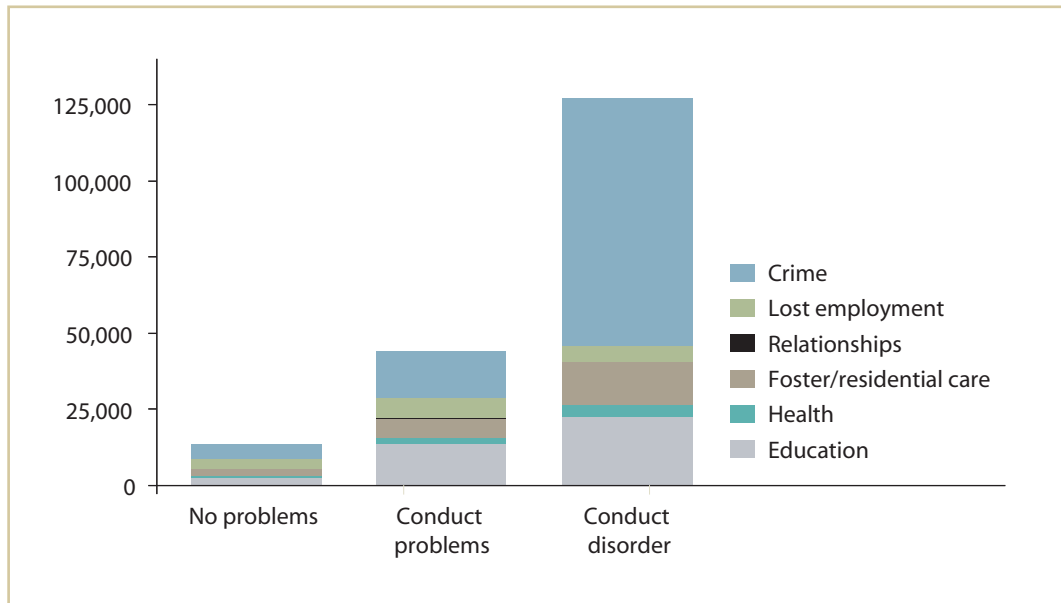
Similarly, the costs of schizophrenia in England fall to a host of budgets, and not just to the health care system (see Figure 5). The cost of a completed suicide is not just the amount that is spent by health or criminal justice or other agencies, but is the lost productivity and the various intangible costs, including the pain and grief experienced by relatives and the lost opportunity for individuals who complete suicide in terms of future life experiences.

Is early years' intervention cost-effective?

The systematic review and the trawl through other sources in Network countries produced a relatively modest number of studies, particularly within the European Union, that look at cost-effectiveness of mental health promotion and prevention initiatives. In the *MHEEN Policy Briefing 3 (Making the Economic Case for the Promotion of Mental Well-being and the Prevention of Mental Health Problems)* we go through the evidence in more detail, but a couple of examples can be highlighted here.

There is now an 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. Many of those consequences can be expressed in economic terms. One example is shown in Figure 6, 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).

These costs can be compared with the costs of delivering evidence-based interventions, such as the parenting interventions that Dretzke et al (2005) describe. This analysis suggested that, even if only very modest quality of life benefits were gained by children as a result of parents taking

Figure 6: Conduct disorder costs into adulthood (€, 2002 prices)

part in group-based programmes, these interventions were likely to be cost effective. Similarly, in the US, a wide-ranging review by Aos et al (2004) pointed to the long-term net benefits for a variety of intervention programmes for children and young people.

Is suicide prevention cost-effective?

Remarkably, despite suicide prevention often being the only target for public mental health promoting strategies, there is limited knowledge on the cost-effectiveness of area-based suicide prevention strategies. Recent European analysis includes work in Scotland suggesting that the new national strategy is likely not only to be cost-effective, but cost saving if just five of the approximate 800 suicides per annum could be avoided (McDaid et al 2007b).

Training to improve the recognition by primary care physicians of individuals at risk of suicide has also been highlighted as effective (Mann et al 2005). One evaluation, set on the Swedish island of Gotland, looked at an educational programme for general practitioners to improve their ability to recognise and treat the symptoms of depression (Rutz et al 1992). Although there were methodological limitations, the study suggested that the programme would save more than it cost to implement, in part because of the avoidance of costs associated with suicide. Another training intervention in England that focused on the risk assessment and management of suicide indicated that if a 2.5% decrease in the suicide rate could be achieved, the cost per life year gained would be just £3,391, a value considered to be highly cost-effective in high-income countries (Appleby et al 2000).

Shifting the balance of care from hospitals to the community

One of the greatest barriers to better mental health care in a number of countries in Central and Eastern Europe is the continued use of institutional care, as exemplified by the old psychiatric asylums, dispensaries and 'social care homes' that operate at very low standards and where

human rights are often overlooked. There are well-documented accounts of individuals admitted to institutions being kept in 'caged beds' or solitary confinement, experiencing physical or sexual abuse, or electro-convulsive therapy without anaesthesia or muscle relaxants. It is important to distinguish between these settings and the social care facilities that accommodate many thousands of people in countries such as the UK, where standards are much higher.

Charting the exact balance of mental health care across 32 countries was beyond the resources of MHEEN, but we were able to examine a number of important features. First, we asked Network partners to describe the general direction of movement in the provision of institution-based services. Second, we were interested in the economic barriers to changes in the balance of care, and in the economic incentives that had been found to support movement away from reliance on institutional services.

Our objective in developing the questionnaire was to explore issues of economic barriers and incentives affecting the shift in the balance of care, to look at whether the mix of services and support provided across Europe is appropriate, and to collect data that would allow us to make cross-country comparisons.

Among the information that we requested from each country was background data on facilities and residents, policies that might promote or hinder the process of deinstitutionalisation, and barriers and opportunities to shifting the balance of care towards community programmes. The availability of information was sometimes limited, so some caution is necessary in interpreting the findings.

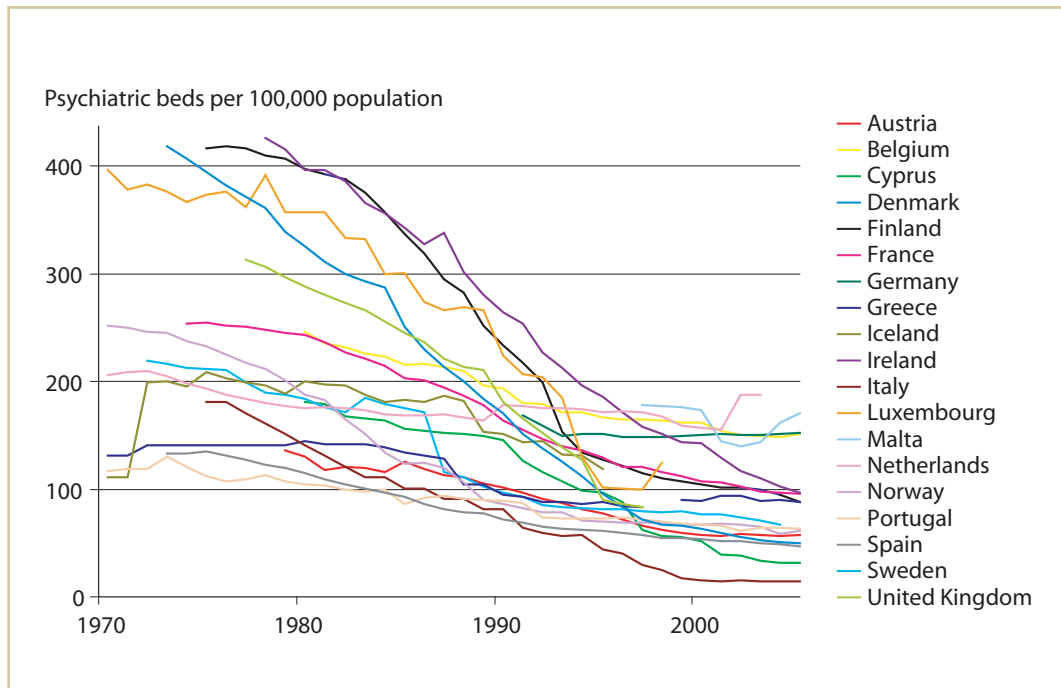
Changes in provision

The implementation of deinstitutionalisation across Europe varies according to resources, financial incentives, and national traditions. Therefore, it is not surprising that the countries in our project occupy different stages in the process of shifting care. For the majority of countries in Western Europe, deinstitutionalisation is quite advanced, to the extent that in Austria, England, Germany, and Spain there are already signs of re-institutionalisation (increases in the numbers of forensic beds, involuntary admissions and in the number of people with mental health problems in prison).

In Central and Eastern Europe, for the most part, the process has just commenced; little change can be observed in Romania or Turkey, although the case of the latter is somewhat different to other European countries in that it has always had a much lower number of beds, but also little community-based support

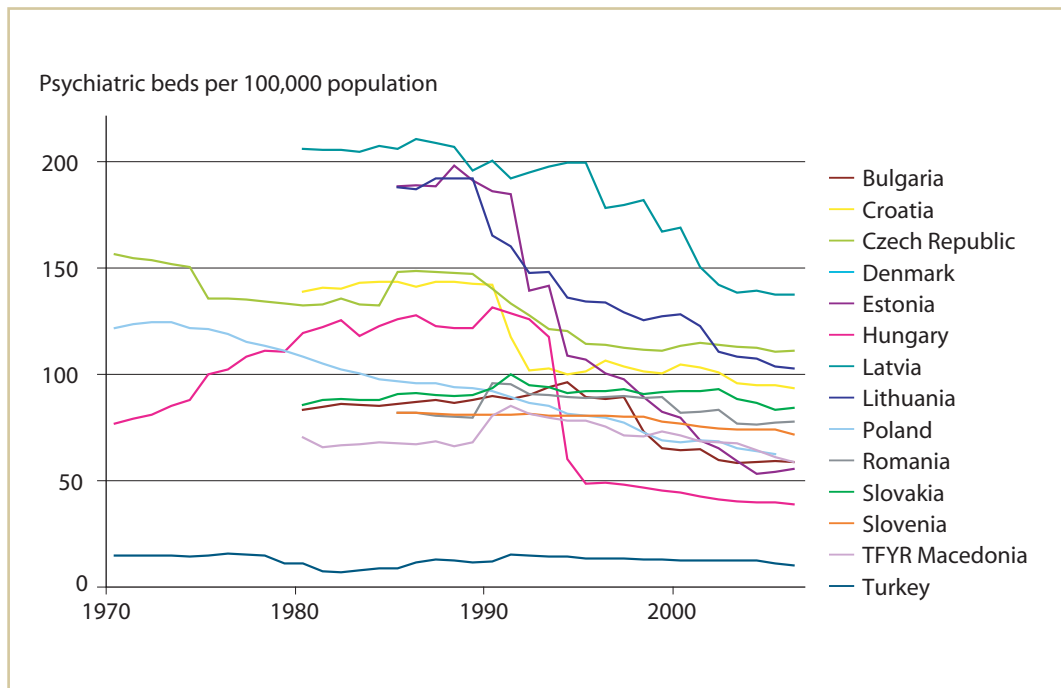
Since the 1970s, the availability of psychiatric beds across most parts of Western, Central, and Eastern Europe has been greatly reduced. Figure 7 illustrates trends in Western Europe from the 1970s until 2005; in all countries, bed numbers have fallen sharply. Individuals have been transferred to other settings such as general hospitals or various forms of community-based supported living establishments. For Central and Eastern Europe, there has been significant progress towards deinstitutionalisation since the 1980s, in Estonia, Latvia, and Lithuania in particular; but little change in countries such as Romania, Slovakia, Slovenia, and Turkey (see Figure 8).

Figure 7: Trends in availability of psychiatric beds in Western Europe



Source: World Health Organization Health For All Database 2008

Figure 8: Trends in availability of psychiatric beds in Eastern Europe



Source: World Health Organization Health For All Database 2008

In four countries (Iceland, Italy, Liechtenstein and Sweden), there are now no psychiatric hospitals at all, and in the majority of other West European countries, the numbers of beds and residents have decreased. In general hospitals, the most common experience is of a fall in the number of beds and residents. However, data may not include beds in social care facilities, where it has proved particularly difficult to obtain data for some countries; this is mainly because social care services are often a regional or municipal responsibility. Of those countries that could provide information, numbers of psychiatric beds and residents tended to increase.

In most of the new Member States, the picture is much more mixed, and the availability of data often very limited. There have been some reductions in beds in psychiatric facilities in some countries, but also a limited increase in the number of beds in general hospitals and even smaller increases in community-based care. However, there is also some evidence to suggest that many individuals may be transferred to long-stay social care homes, rather than living within the community.

Changes in admissions and discharges

Changes in the provision of beds also influence admissions and discharge rates to the type of facility concerned. For psychiatric hospitals in Western Europe, the situation is mixed, but the majority have seen discharge rates increase. For general hospitals, the trend has been for increases in both admission and discharge rates. In social care facilities, the picture is less clear due to the lack of data. Where data were available, overall, there has been an increase in throughput, with more admissions and discharges. In new Member States in Central and Eastern Europe, where data were available, similar increases in throughput can be seen in all three domains of care.

Policies to develop community care and the allocation of resources

An important factor regarding these changes in the provision and use of mental health facilities is the existence of formal policies to encourage or implement them. A nation's mental health policy establishes the crucial framework for the delivery of care. This being said, several MHEEN countries still do not have a formal policy on mental health care, or on community care development.

In Central and Eastern Europe, although the majority of countries have a mental health policy, many plans are outdated and do not abide by international or European Union standards. In all countries of Western Europe, some form of community care is available, and in the majority, it is relatively well developed and widely available, although there are exceptions, most notably in Belgium. However, a few countries reported that community care has become over-stretched, due to the high demand for services that has followed from apparently increasing mental health needs, and a concomitant decrease in the numbers of beds in psychiatric and general hospitals. In Central and Eastern Europe, community care typically is severely limited or even not available at all.

Paper policies alone will be insufficient; the development of community care is greatly assisted by the allocation of resources and the injection of additional funds to help build new services whilst maintaining existing services during a transitional period. Most countries in the old EU have provided additional resources to help in rebalancing care, although there are exceptions (such as Italy) where families have had to provide much support.

In most of the new Member States, although some additional resources to establish community care have been made available, often there has had to be reliance on funding from overseas governmental donors, non-governmental organisations and more recently the European Union. This has implications for the long-term sustainability of initiatives. Another barrier to rebalancing care is the economic dependence of isolated communities on long-stay institutions; careful thought needs to be given to economic regeneration in these areas as part of any reform package to change the balance of care.

Challenges

Some of the challenges to deinstitutionalisation identified by the MHEEN group include:

- Rigid funding systems that make the re-allocation of resources difficult
- Changes in reimbursement systems (to DRGs) that have changed the incentives for providers of hospital care, in favour of shorter hospital episodes, without leading to the creation of alternative services
- Fragmented/multi-source budgets
- Insufficient and unspecified budget allocation for mental health
- Inadequate funding of outpatient and community care
- Lack of protection or 'ring-fencing' of funds
- Limited availability of community services
- Economic impact of hospital closures on a local economy
- Shortages of suitably trained staff
- Opposition from the psychiatric profession and the community
- Inadequate services in primary care
- Inadequate coordination and planning of services

Opportunities

Much progress has been made where opportunities to change the balance of care have presented themselves. They include:

- A positive environment to carry out reforms, including:
 - an extensive programme of health care reforms
 - health put at the top of the political agenda
 - increasing recognition of mental health problems
- Increasing funds and better funding mechanisms
- Extending national and mental health plans to include community service
- Widening the referral network of mental health to include community services
- Ring-fencing of resources for development of community services
- Increased visibility and transparency of mental health budgets
- Seed money and pilot projects to build community services

- European Union subsidies for investment in community infrastructures
- Capital investment in community care and less on institutions

Countries in the MHEEN Network have varied experiences and challenges ahead as they continue to shift care from hospitals to the community. There is a growing consensus around the desirability of community care arrangements that aim to deliver treatments and support services that are tailored as far as possible to individuals' needs.

As the new Member States in Central and Eastern Europe continue moving towards deinstitutionalisation, they must be aware of the risks of closing beds before adequate community care is developed and funded. There is a constant concern that bed reductions always precede the development of comprehensive and well-developed community-based services, leaving both hospitals and community services under-resourced. As we know, closing an institution is easy – the challenge is to create and develop good systems of community care.

Employment and mental health

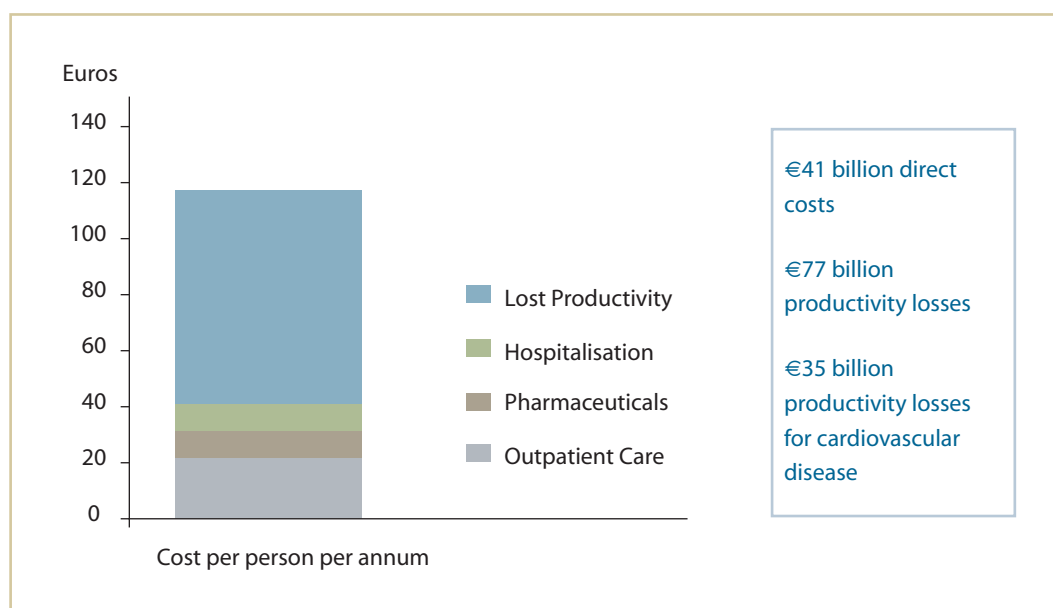
Employment is a fundamental component of, or contributor to, quality of life, the main source of income for most people, commonly a major influence on someone's social network, and also a defining feature of social status. The interconnections between mental health problems and employment are many and various. One of the tasks of MHEEN was to pool evidence from across Europe on the employment experiences of people with mental health problems (including economic inactivity, absenteeism, early retirement and impaired performance at the workplace) and on the efforts made by employers, trade unions, health systems, and governments to address the difficulties faced.

The importance of employment is multi-faceted. As well as those important connections to individual well-being just mentioned, employment is a major contributor to national and European productivity and competitiveness, and obviously also has implications for the sustainability of social welfare systems. Many national governments 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.

Another area of attention is the need for policies to promote the long-term inclusion in labour markets of people with enduring and perhaps serious mental health problems. Here the challenge is to develop supported employment services that help make the (often) considerable leap from long periods of economic inactivity and social exclusion into the paid workforce. In this *MHEEN Policy Briefing*, we focus solely on workplace-based mental health promotion, although a later *MHEEN policy briefing (Brief 5)* covers the wider span of connections between employment and mental health.

A semi-systematic review was carried out to identify what is known about cost-effectiveness and workplace mental health interventions in European countries. This was supplemented by work by MHEEN Network members who were asked to identify additional and current evaluations. There is much less empirical evidence for Europe than in the US, where employers often have direct responsibility for the health insurance of their workers. The same incentive is not so evident in Europe, which may account for the weaker evidence base (Dewa et al 2007).

Figure 9: Costs of depression in the EU



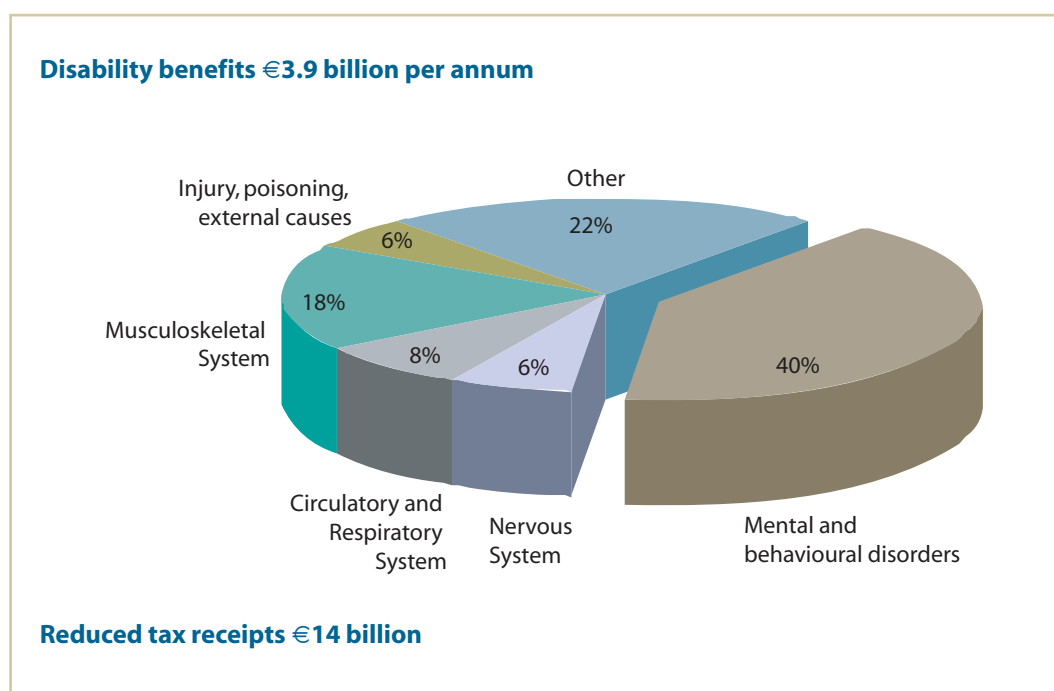
It is worth remembering the major impact of mental health problems on employment and related dimensions. For example, work by the European Brain Council on the costs of mental disorders in the EU points to the large contribution of lost productivity through absenteeism made to the overall cost (Sobocki et al 2006). Interestingly, comparing their figures with figures for cardiovascular disease (Leal et al 2006), the productivity losses from depression, for example, are considerably larger (see Figure 9).

In fact, absenteeism may not be the major source of economic losses associated with depression or other mental health problems. American evidence suggests that the cost associated with 'presenteeism', which is a short hand term for under-performance whilst actually at work, could be as much as five times greater than the cost of absenteeism.

The impact of economic inactivity or absenteeism on social security and related systems is also evident across many European countries. Total disability benefit payments in England, Scotland, and Wales in 2007 amounted to €3.9 billion, with the largest contribution (40%) attributed to 'mental and behavioural disorders'. Given that these are self-reported and that many workers may prefer not to identify their health problems as psychiatric, this could well be an underestimate; moreover it does not take account of tax revenues forgone (see Figure 10). In France, 25% of illness-related social security expenditure is due to stress (Bejean and Sultan-Taieb 2005). Between 1990 and 2003, disability benefits for mental health problems in Finland increased by 93%, and in the latter year accounted for 42% of all benefits paid (Jarvisalo et al., 2005). The General Workers Union in Spain estimate that between 50 and 60% of sick leave and disability claims are due to stress at work. Many other examples from across Europe could have been cited.

What is the economic evidence on workplace initiatives to address the mental health needs of employees? Most of the evidence again comes from the US, and much of it is generated by companies themselves, which may be a limitation in that such studies tend not to have gone through a peer-review process. Nevertheless, they do offer tantalisingly interesting insights.

Figure 10: Disability benefits by disease in Great Britain



In England, for example, London Underground has instigated a stress reduction programme for its 13,000 employees. The internal evaluation suggests that in the first two years of the scheme's operation, a reduction in employee absence avoided costs of more than €705,000. This was eight times greater than the level of investment into the scheme. In addition, there was also evidence of improved productivity by those at work and some positive healthy lifestyle changes by employees (Business in the Community, 2005).

Similarly, a stress management programme in a Belgian pharmaceutical company involved a course for those employees identified as being at risk, and training for company management on how to recognise the signs of stress. An evaluation of the programme concluded that while the gains achieved by the scheme in terms of a reduction in absenteeism were just 1%, the costs avoided by the company from stress-related absenteeism were so substantial that cost savings of €600,000 were still realised (Polemans et al., 1999).

In strengthening the evidence base on workplace health promotion a number of key challenges must be met. Evaluation in the workplace is clearly a sensitive issue; both employers and employees may be reluctant to participate. Caution must also be exercised over the results of evaluations: interventions reported to have significant net benefits may be produced by organisations that stand to gain commercially from their use.

Nonetheless, recognition of the economic impact of poor workplace mental health at national levels in the EU does provide an opportunity for action. Policy makers may wish to consider carefully providing financial support for the evaluation of workplace-based mental health interventions. Already there are some encouraging signs: a number of ongoing and planned economic evaluations have already been identified by MHEEN. One pragmatic approach may be to add an economic dimension retrospectively to existing studies of the effectiveness of interventions.

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. 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 resources to invest in effective workplace mental health-promoting interventions.

The next section provides a focus specifically on employment for people with severe mental illness, in particular schizophrenia.

Structural socioeconomic characteristics and employment of people with severe mental illness

Mental illness is an increasing cause of lost productivity in the EU and worldwide (Andlin-Sobocki et al 2005). Most cost-of-illness studies come to the conclusion that indirect costs due to productivity loss account for more than half of the total costs of mental illness. In contrast to somatic chronic diseases, the exclusion of mentally ill people from labour-force participation is the main cause of the high level of productivity loss.

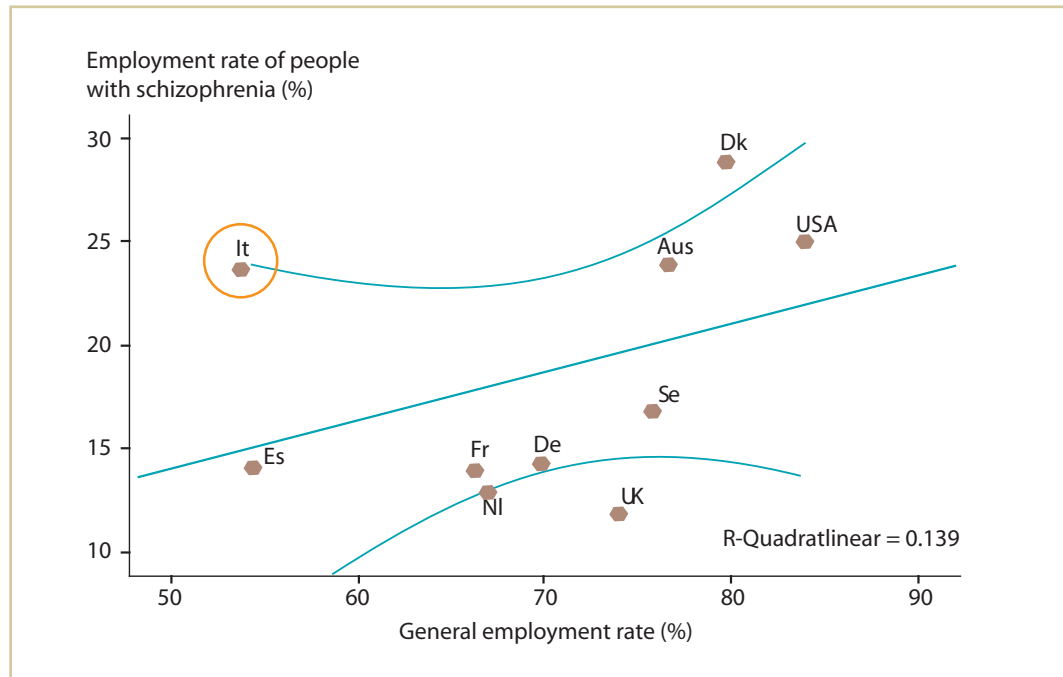
At the international level, valid data on labour force participation of people with mental illness are extremely rare (Marwaha and Johnson 2004; Marwaha et al 2007). Existing data are mainly focused on people with schizophrenia and based on very different types of studies (Marwaha and Johnson 2004). Consequently, the variance in employment rates is huge, even between studies conducted in the same country. Nevertheless, international comparisons are possible on the basis of data currently available (Kilian and Becker 2007). For countries with available data, findings indicate that employment rates among people with schizophrenia are lower than in people with disabilities in general and, with the exception of Denmark and Italy, that they are even lower than in people with severe disabilities (Kilian and Becker 2007).

High rates of unemployment, stigma and discrimination, economic disincentives and welfare trap mechanisms are regarded as important barriers to employment for people with mental illness (Rosenheck et al 2006). In the case of unemployment, it is plausible to assume that decreased job opportunities in the general population are related to decreased job opportunities for people with mental illness, as long as people with mental illness and non-disabled people compete for the same jobs. However, people with mental illness are often employed in the secondary labour market, for example, in sheltered employment settings, and the situation there may be largely independent of changes in the primary labour market. This might be the reason for the finding that employment rates among people with schizophrenia are independent of the general employment rate (as applies for the UK; see Marwaha and Johnson 2004).

Nevertheless, data on labour force participation in an international context do indicate that a higher employment rate among people without disabilities is associated with higher employment rates in people with schizophrenia (see Figure 11). The only exception is Italy, which appears to have a relatively high employment rate among people with schizophrenia in spite of a low general employment rate.

A study in the USA by Polak and Warner (1996) showed that people with mental health problems who were employed had an income which was only slightly higher than that of people without employment due to the loss of social benefits and increased taxes. The authors

Figure 11: General employment rates (OECD 2004) and employment rates of people with schizophrenia (Marwaha and Johnson 2003)



concluded that the system of social benefits and taxes worked as a disincentive preventing unemployed people with mental illness from taking a job. At an international level, this potential disincentive effect of the social benefit and the income tax system can be analysed by examining relationships between the average effective tax rate and labour force participation of people with mental illness.

The average effective tax rate (AETR) is the proportion of additional income gained by change from unemployment to employment that will be 'taxed away' by increased taxes and reduced benefit payments (Organisation for Economic Co-Operation and Development (OECD) 2004). Therefore, it can be used as an indicator of disincentives to take up employment. The association between the effective tax rate of changing from unemployment to employment and labour force participation in people with schizophrenia is negative but weak (see Figure 12). However, the distribution of countries in the scatter-plot reveals that Denmark and the UK are outliers from the general trend. In the UK, the employment rate of people with schizophrenia is low despite a low AETR; in Denmark, people with schizophrenia have a relatively high employment rate in the face of a high AETR. After removing both countries from the analysis, the negative relationship becomes significant and the goodness of fit of the model (R^2) increases to .59.

The organisation of the social welfare system can work as a barrier to employment in several ways. Regulations concerning the responsibility (of employers) to continue paying wages in the case of short-term sick leave can work as a barrier if this responsibility shifts the costs of illness to the employer alone. On the other hand, rules for access to unemployment benefits or disability benefits play an important role, particularly in the case of long-term unemployment. The average net replacement rate (ANRR) is the percentage of former net income which will be substituted by unemployment benefits or other social benefits in the case of long-term unemployment (Organisation for Economic Co-Operation and Development (OECD) 2004).

Figure 12: Average effective tax rate and employment rate of people with schizophrenia

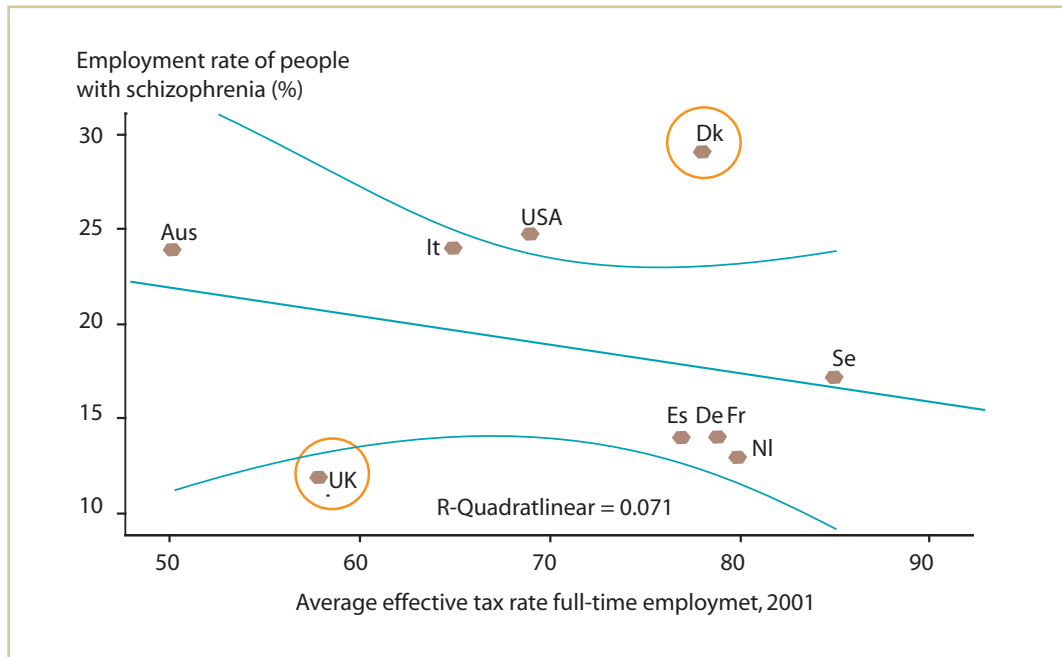
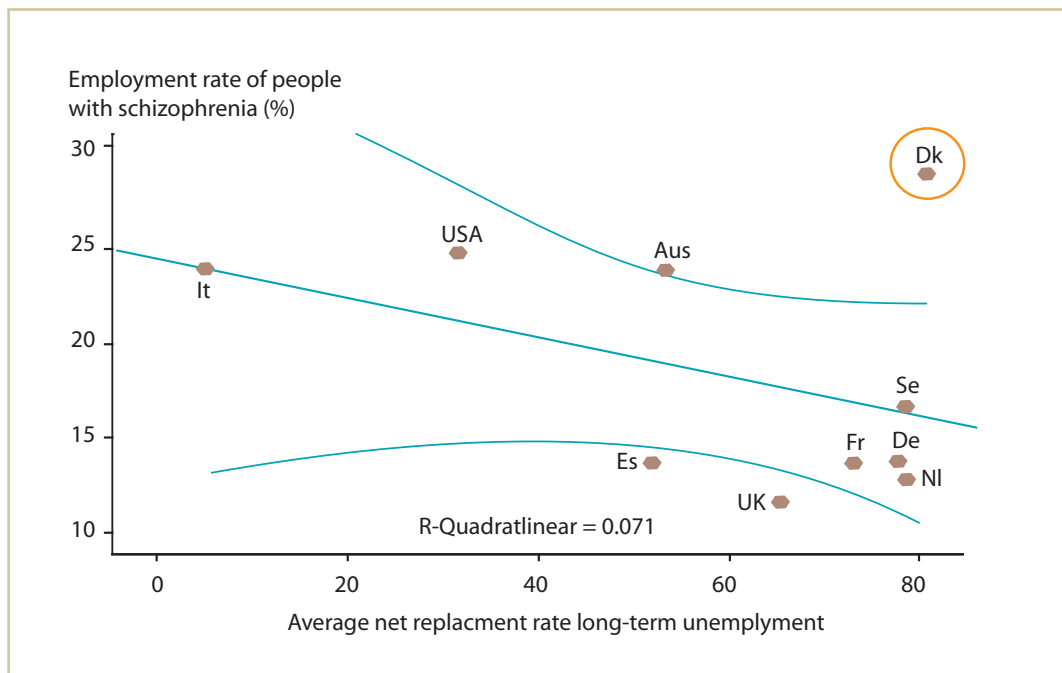


Figure 13: Average net replacement rate and employment rate of people with schizophrenia



Using the ANRR as a predictor of the employment rate among people with schizophrenia indicates a slight but not significant negative relationship with an R^2 of .17 (see Figure 13). Again, Denmark can be identified as an outlier with a high employment rate, notwithstanding an ANRR of about 80%. After removing Denmark from the analysis, the negative relationship becomes significant and the R^2 increases to .58.

Stigmatisation and discrimination of people with mental illness are common phenomena in contemporary societies. Recent studies show that people with mental illness regard stigmatisation as one of the biggest barriers to finding a job (Schulze and Angermeyer 2003). Population studies revealed that 30% of the general population would refuse to work with a person who suffers from schizophrenia (Angermeyer and Matschinger 1997). The few studies that have looked at the willingness of employers to employ mentally ill people suggest that a majority of companies are very reluctant (Manning and White 1995; Olshansky, Grob and Malamud 1958). Currently, international data on stigmatising attitudes among employers or co-workers are not available. Thus, it is not possible to estimate whether variations in these attitudes across countries affect employment rates in people with schizophrenia.

Conclusion

The results of the analyses described here suggest that international variation in the employment rates of people with schizophrenia can be partly explained by structural socioeconomic and social policy characteristics. Exceptions from general trends suggest that negative effects of structural disadvantages on employment rates of people with mental disorders might be reduced by policies targeted at mental health. Nevertheless, caution should be exercised because data on employment rates were taken from small regional samples, not necessarily representative of whole countries. In addition, employment data and structural country data do not always relate to the same year. To improve our knowledge on barriers about the employment of people with mental health needs the systematic collection of data on both employment and stigmatisation should become a constituent part of European mental health policy.

Enhancement of the European Service Mapping Schedule

The European Service Mapping Schedule (ESMS), developed by a group of researchers known as the EPCAT team in the context of a European collaborative study in the mid-1990s, has been used for purposes of policy evaluation and research in a wide variety of European countries. Its implementation is however a fairly lengthy procedure, service models that have come to prominence in the last decade are not included, and the original selection of items for inclusion was based on consensus among a small expert group rather than on any wider sampling of opinion.

In the current project, the aim was to extensively revise and abbreviate the ESMS in order to produce an up-to-date and feasible tool to facilitate standardised monitoring and planning at local, national, and international levels, as well as assessment and comparison of policy impact and implementation in different regions of the same country or among the European countries.

Use of ESMS in mental health economics studies

The ESMS has advantages over other assessment systems:

- It provides a framework and a model for service assessment that allow international comparison between local areas, as the operational definitions allow comparison of like with like across countries.

It allows structured assessment of both types of care available and service utilisation at the level of a catchment area service provision at a catchment area level (meso-level).

The first version of the ESMS-1 was useful in various research contexts, but a means was not available for linking the service organisation and utilisation data that it yielded with costing and health economic assessment. Three main limitations of ESMS-1 have been pointed out:

- Feasibility problems, with substantial data recording often needed at most of the services in a catchment area in order to complete the instrument fully.
- Narrow focus on adult mental health services.
- Difficulties in differentiating specific types of services due to the non-specificity of the coding system.

ESMS-II has therefore been designed – as part of the second phase of MHEEN – to overcome these feasibility problems. Other instruments based on ESMS have also been developed which now allow use in broader population groups, for example, older people.

Piloting the use of ESMS-II for macro-level economic assessment produced realistic results in several respects. Firstly, it showed that the ESMS principal types of care data collected in different catchment areas in two European countries, the UK and Germany, can be used for such an exercise if regional economic databases on service unit costs are available. Secondly, it produced realistic results relating to the annual direct mental health care costs for adults per 100,000 population: €11.1 million for Havering (UK), €29.6 million for Islington, €12.8 million for Warwickshire, €23.0 million for the Dresden catchment area, and €13.1 million for Plauen. These figures clearly reflect the density of the established services; furthermore, the German figures, established by a bottom-up data collection approach, were comparable to the mental health budget of a Bavarian catchment area. This had been estimated using data collected by health insurance funds and governmental social security agencies (€13 million per 100,000 population in an Upper Bavarian region, at 2000 prices). Thus, there is some preliminary evidence of the external validity of the results of this ESMS-II macro-level economic exercise.

Finally, the exercise illustrated that cross-national realistic regional mental health care cost comparisons could be potentially conducted using this approach, thus realising one of the most important international aims of the ESMS development.

Adapting the ESMS for MHEEN

In order to revise the tool, preliminary work included a review of previous experience using the ESMS tool, and a questionnaire survey of stakeholder views to establish which types of information regarding the characteristics and service use patterns in local catchment area service systems are most important. A revised brief version of the ESMS was developed following this consultation and two meetings of the group (including some members of the wider MHEEN group) at which there was intensive discussion. The aim was to maximise relevance to policy makers, service planners, health economists and mental health services researchers, as well as to improve feasibility and simplicity.

Some brief socio-demographic and economic descriptors of mental health catchment areas were also identified for inclusion in the instrument. Identification of these drew on participants' experiences of developing and applying the European Socio-Demographic Schedule, on a review already carried out of the state of the art regarding socio-demographic indicators at mental health catchment area level, and on work carried out in other EU-funded projects in this field.

To assess the validity, feasibility, and practicalities of applying the ESMS-II, a pilot exercise was carried out in seven European countries – Norway, UK, Germany, Spain, Italy, Poland, and Slovakia. In each country, three catchment areas were identified, representing a spread of urban to rural densities. Each catchment area then had its service provision mapped as comprehensively as possible using the ESMS-II tool. Below we describe this exercise and summarise some of the initial findings.

The pilot

Twenty catchment areas (three each in Norway, Germany, Slovakia, the UK, Spain and Poland and two in Italy) participated in the pilot. Completion was feasible in each country, though the greatest difficulties encountered were in Germany, where the insurance-based funding system means catchment areas are less clearly defined, limiting the comprehensiveness of information obtained. Countries also varied in the extent to which full information was obtainable from non-governmental and public sector social services. However, in each area the conclusion following consultation with stakeholders was that the mapping resulted in a useful and valid representation of the catchment area service system. Around twenty researcher days were sufficient for completion of the ESMS-II in each catchment area.

Data on a range of catchment area service characteristics were obtained through this mapping, and the two tables below illustrate the types of information yielded. Table 1 shows some of the data obtained about the characteristics of the local service system and the types of care available within it. In the table, Y indicates that all the catchment areas mapped in the relevant country had the type of care shown, and N that none of them had the relevant type of care. Where a proportion is shown, some catchment areas but not others had the type of care listed. Considerable variation both between and within countries is evident.

Table 1: Types of care available in each country (selected data)

	I	GB	E	SK	PL	D	N
Suicide prevention strategy	1/2	1/3	N	N	N	1/3	N
Acute day service	1/2	1/3	Y	2/3	2/3	2/3	N
Intensive home treatment	N	Y	Y	N	N	N	2/3
Home visits for continuing care	Y	Y	2/3	1/3	N	Y	Y
Support in open market jobs	1/2	Y	N	1/3	N	2/3	N
24 hour staff community house	Y	Y	Y	N	1/3	N	
Early intervention service	N	Y	Y	N	N	N	Y
Assertive outreach	N	Y	N	N	N	1/3	1/3
Specialist children's service	Y	Y	Y	Y	2/3	2/3	Y

Table 2: Service utilisation per 100,000 in each country (preliminary figures)

	I	GB	E	SK	PL	D	N
Inpatients	10	43	6	53	16	108	59
Detained patients	1	18	2	0	5	8	17
Patients in acute community beds	14	4	0	0	0	0	0
Weekly day services attendances	153	424	156	27	17	212	30
People in community residential places	64	142	14	7	14	153	
Community service caseload	1003	673	1530	5505	2222	268	780
People supported in employment	20	29	0	27	0	55	0

Table 2 illustrates service utilisation data identified by ESMS-II, again showing a selection of the data available, aggregated to give a figure for service utilisation per 100,000 population within each country.

Very wide variations are again evident for most indicators examined, with some countries having many times greater numbers of inpatients, compulsorily detained inpatients, day service attendees and people living in supported accommodation in the community. The number of people supported in open market employment is rather low throughout. Community service caseloads show rather less variation than other indicators, suggesting that overall numbers using secondary mental health services are rather more similar across catchment areas than the distribution of patients between different types of care.

Conclusion

The objectives of this work were achieved through the successful development and piloting of a new ESMS tool, drawing on experience gained from the original tool, and now making much more use of the views of a range of stakeholders. As illustrated, this yields information regarding the details of service provision at catchment area level that is potentially useful for a range of constituencies including mental health service researchers, health economists, local area service planners, and policy makers.

The considerable variations between catchment areas within the same country illustrate the usefulness of examining real patterns of service use at a catchment area level rather than relying only on summary statistics and expert reports regarding a whole country. Further plans are being formulated both for development of a briefer version of the tool, which will contain only information on the types of care available and not on service use patterns, and for the further application of ESMS-II in European-level collaborative studies.

Challenges in mental health policy and practice in Turkey

MHEEN has been collecting much data at country level. This has allowed us to explore and reflect on some of the challenges faced in very different settings across Europe. Here we look at the situation in Turkey, a candidate for accession to the European Union since 2005, and a nation undergoing rapid economic and social transition ever since.

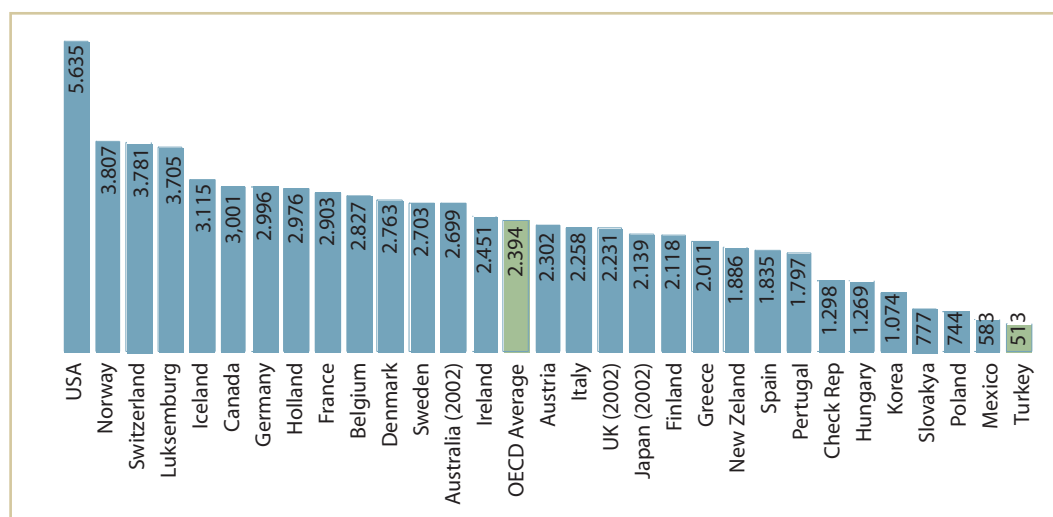
Health care funding

Turkey is a developing country with an approximate GDP of US\$ 8,000 (€5,100) per capita. In the last two years, Turkey has achieved high growth rates and has undertaken major health care reforms. In 2005, 7.6% of total GDP was spent on health care, which is high for a developing country (see Table 3). The public sector accounts for 71% of total health care expenditure. In terms of per capita health care spending compared to the other OECD countries, Turkey spends the least: US \$500 PPP (purchasing power parity) (see Figure 14). However, this is directly due to Turkey's relative low GDP.

Table 3: Demographic and economic indicators

	1995	2000	2002	2004	2005
Total population (thousands)	61,763	67,420	69,388	71,332	72,005
Population aged 0–14 (in % of total)	32.9	30.0	29.5	28.8	29.2
Life expectancy at birth, total	67.9	70.5	70.8	71.2	71.4
GDP per capita in PPP	5,561	6,814	6,550	7,529	8,141
Growth rate 1995–2005	8.0	6.1	3.1	9.6	8.3
THE in % of GDP	3.41	6.6	7.4	7.7	7.6
Public HE in % of THE	70.3	62.9	70.4	72.1	71.4

Figure 14: Per capita health care spending (2003, US\$ PPP)



The question remains as to whether this funding is being used effectively within the Turkish health care system and whether Turkey is able to improve health services. Our research has concluded that the resources available for health services are not being used effectively.

The country's once-complex health system has been greatly simplified since 2003 with a new emphasis placed upon the role of the private sector. Today, Turkey's financing agents include social security organisations; a Green Card scheme to cover health care expenditures for people who cannot afford such costs; out-of-pockets payments; and a very small private insurance system. These agents purchase health care services from both the public and private sector. Within the public sector, the Ministry of Health is the main service provider. Since the beginning of reforms in 2005, social security organisations have begun to purchase health care from the private sector and many private hospitals have been built.

Mental health care in Turkey

The outlook for the health care sector has changed quite rapidly in the hope of accession to the EU, but unfortunately, the mental health sector in particular has not benefited much thus far. Mental health is a major public burden in Turkey. Table 4 illustrates the results of the latest burden of disease study completed in 2003. In terms of Disability-Adjusted Life Years (DALYs), neuropsychiatric diseases contribute a significant number of years lost to disability (YLDs). Although Turkey is focusing more attention on most of the prominent health risks such as cardiovascular diseases and cancers, mental health does not get the attention that it deserves. Furthermore, due to lack of reliable data, the prevalence and impact of mental health disorders in Turkey remains unknown.

Turkey has both psychiatric hospitals and separate psychiatric wards in general hospitals. In total, there are eight psychiatric hospitals spread across 81 provinces, leading to access problems for rural populations. Although general hospitals provide psychiatric services, there are not enough beds adequately to cover need.

Table 4: Burden of mental diseases (2003)

Percentage distribution of the diseases causing YLD		Percentage distribution of main disease groups by DALY	
Unipolar depressive disorders	8.7	Cardiovascular	19.3
Osteoarthritis	6.5	Neuropsychiatric	13.3
Iron-deficiency anaemia	4.1	Infections excluding HIV	11.8
Hearing loss, adult onset	3.8	Injuries	10.8
COPD	3.5	Maternal and perinatal	10.1
Cerebrovascular diseases	2.8	Cancers	6.8
Perinatal causes	2.8	Respiratory system diseases	6.3
Alcohol use disorders	2.3	Musculoskeletal diseases	4.5
Schizophrenia	2.3	Digestive system diseases	4.1
		Nutritional deficiencies	4.1

Source: Burden of Disease and Cost-Effectiveness Study www.hm.saglik.gov.tr

Table 5: Beds in Turkey's mental health hospitals

Year	Hospitals	Beds	Inpatients	Beds in wards
1991	9	4,140	26,240	-
1995	8	3,772	31,828	-
2000	8	3,627	34,863	-
2001	9	4,332	37,741	-
2002	9	4,256	29,933	-
2003	8	3,720	38,763	1,866
2004	8	3,777	38,447	2,477

Total number of psychiatric beds: 6,254

0.9 beds per 10,000 population

Table 5 shows the numbers of beds in each of the eight psychiatric hospitals. They total 3,777 beds, with another 2,477 beds in general hospital psychiatric wards, totalling 6,254 psychiatric beds, or 0.9 per 10,000 population. These beds accommodated 38,447 inpatients in 2004, insufficient to meet need.

Turning attention now to the issue of human resources, it can be noted that there are 920 psychiatrists in Turkey, which equates to a mere 1.2 psychiatrists per 100,000 population. Furthermore, although Turkey has a young population, there is currently only one child and adolescent psychiatrist per 500,000 children (18 and under).

Turkey does not have enough human resources, and those it does have are unequally distributed across the country. Two-thirds of psychiatrists are located within three of the largest cities: Istanbul, Ankara and İzmir, leaving rural areas with few if any service providers. The total number of psychiatric service providers (including psychiatrists, clinical psychologists, social workers, nurses, and others) is 2,000. For a population of 72 million such resources are scarce, and when available, often stretched beyond capacity.

Challenges in mental health care policy

Challenge 1: Overcoming current perceptions and practices in mental health care

Mental health problems are not afforded the same attention as serious physical ailments. There is currently no discussion among policy makers in Turkey concerning contemporary approaches to mental health policy, such as community care, prevention and the promotion of good mental health.

Turkey's mental health policy document was published in 2006. It outlines various promises, including the improvement of community care and how deinstitutionalisation will occur. However, there is scepticism as to whether the promises in this policy document will actually materialise. This is because mental health is not high on the agenda of policy-makers. There are

several examples from the past that these types of documents, without adequate support from policy-makers, remain solely as blueprints.

We have noted that bed numbers are low in comparison to many European countries, and most available resources are tied up in large hospitals at the frontline of psychiatric treatment, which act primarily as places of shelter, an outdated and inadequate model of care. This institutionalised care is mostly limited to the eight regional psychiatric hospitals. Upon discharge, patients typically return to their families but can be readmitted if necessary.

Shortages of day care facilities and other forms of social care are further major problems facing the country. Formally, organised community-based care is simply not available. Although there is a section concerning community care in the mental health policy document, there are no means, programmes or resources available for implementation. There are sporadic programmes in place but these are on a project basis, for example, when a national or international non-governmental organisation undertakes a project in Turkey. These short-term solutions are not sustainable; once the non-governmental organisation project has been completed, the programmes tend to vanish.

The country also does not have a strong level of primary care services in which mental health can be addressed. Therefore, prevention and promotion remain lofty ideals with little practical implementation.

Thus, a paradigm shift is needed to improve the mental health care sector in Turkey. Many stakeholders are involved in this process, but it is very difficult to change the mentality of an entire country. This is possibly the most crucial challenge facing Turkey.

Challenge 2: Organisational and legal challenges

Turkey does not have an overarching law, which outlines the regulations concerning mental health care. The 2006 mental health policy document does not have any legal status. Currently, mental health care is only mentioned under articles in different legal statutes, such as those covering general social care, the provision of health care services, and financing health care.

Turkey also faces a number of organisational challenges. The Ministry of Health contains two directorates: one for primary health care services and the other for curative services (dealing with hospitals). There is poor coordination and cooperation between these two directorates.

Challenge 3: Problems of access

As noted, there is an insufficient number of doctors and other personnel to meet the needs of mentally ill patients. Furthermore, an uneven distribution of facilities and concentration of resources in a few urban areas limits the general population's access to mental health care.

Status of health economics in Turkey

Health economics and pharmacoeconomics began to be discussed by various stakeholders in the mid to late 1990s. After the 2003 reforms, health care in Turkey introduced an emphasis on management that has since led to the analysis of concepts such as cost-effectiveness and efficiency. However, little has changed and there continue to be very few health economists in the country.

Conclusion

Turkey needs a change in attitude toward mental health care in order to spur the development of adequate infrastructure. Turkey must take a more systematic approach to health economics and capacity building, which must be the first priority for the introduction of economics to mental health care.

Health and social care for people with mental health disorders in Hungary after 1989

Hungary is a representative example of the former Eastern bloc countries that joined the European Union in 2004. The information collected during phase II of the MHEEN project highlighted that, similar to what happened in many other transitional Central-Eastern European countries, the health and social care of people with mental disorders did not experience significant reforms after the fall of the Berlin Wall in 1989.

Health care facilities and human resources

Without substantial funding for their maintenance and modernisation, most health care facilities are currently out-dated in Hungary. The relatively poor working conditions, the worsening financial situation of health care professionals, and the opening of the EU labour market resulted in great problems in maintaining sufficient numbers of highly trained medical professionals in most specialities including mental health.

Demographic changes

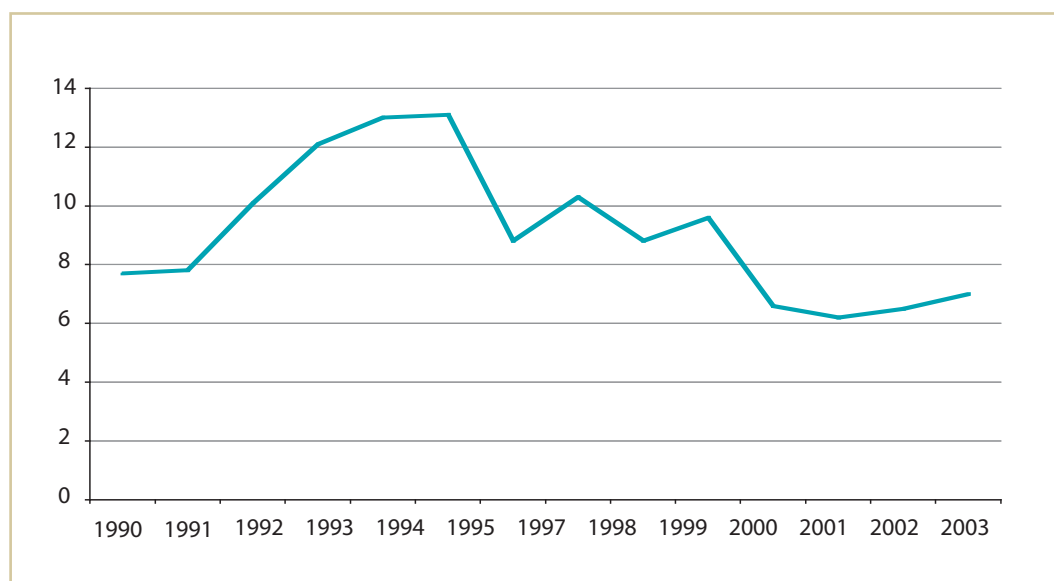
Recent demographic trends have put additional burden on the mental health and social care sectors. Over the past few decades, the country's population has been rapidly shrinking and ageing, especially in the case of men. In 1990, there were 10.4 million people, but this had fallen to 10.1 million in 2006. The World Bank predicts an 8% drop in the population by 2025 when the proportion of people aged 65 and over is likely to increase by 40% (<http://go.worldbank.org/UY03XO1T30>).

Mental health of the nation

Both life expectancy and healthy life expectancy remain well below the EU average in Hungary. The negative impact of economic and demographic change is most apparent on the prevalence of chronic disease and on the mental health status of the nation. Changes in the number of deaths due to mental and behavioural disorders (MBDs) between 1990 and 2003 are presented in Figure 15. Although the statistics have been showing a gradual improvement since the massive peak in 1995, the global picture remains negative with suicide rates still being twice the EU average.

Overall, MBDs are among the third and sixth leading causes of morbidity depending on age and gender, with male depression, alcohol abuse, and bipolar diseases having substantially worse statistics than the EU average.

Figure 15: Standardised death rates per 100,000 population due to mental and behavioural disorders in Hungary (OECD 2007)



Costs of mental disorders

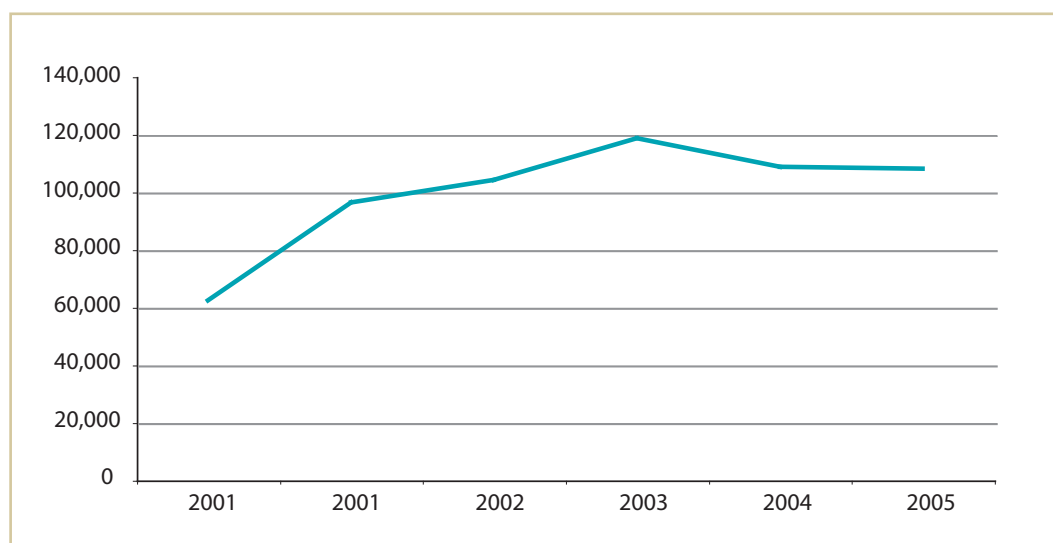
According to the World Health Organisation's Mental Health Atlas (2005), Hungary spends 8% of its health care budget on mental health. More detailed information, collected from the National Health Insurance Fund (NHIF) as part of the MHEEN project, shows that 9.3% of the total drug budget was spent on psychiatric drugs, 6.4% of the outpatient budget spent on primary psychiatric diagnoses, and 5.3% of the inpatient budget spent on psychiatric beds (including acute and chronic beds) in 2006. Based on the available data, however, no reliable estimates could be obtained for the proportion of primary care costs spent on MBDs. In the future, these health care costs are likely to increase both in absolute and relative terms.

Although never estimated before, the lost productivity costs due to mental disorders are likely to be even greater than direct health and social care costs. This statement is supported by the increasing trend in the number of sickness benefit claims due to mental and behavioural disorders illustrated in Figure 16, and the fact that MBDs represent one fifth of all disability pension claims in Hungary (Országos Orvosszakertoi Intezet 2007).

Spectrum and financing of services

Mental health care is financed predominantly by the social insurance system in Hungary. Coverage by social insurance is universal and almost comprehensive, and so voluntary health insurance has only a very limited role. (This situation may change in the near future with imminent plans to reform the Hungarian health insurance system.) As in the case of people with major chronic illnesses and those on social welfare benefits, all existing forms of co-payment are subsidised for people with severe mental disorders and access to care does not seem to be among the most pressing issues.

The problem instead lies in the availability of facilities. Unlike the situation in most West European countries, the planned shift in the balance of care towards more community-based

Figure 16: Number of people with MBDs receiving sickness benefits per year (NHIF data)

care has not started yet in the mental health sector. Until recently, the focus has been mainly on inpatient care and drug therapies. The number of psychiatric beds has been fairly stable in specialist hospitals. (At least this was the case until 2007, when the government closed down the Institute of Psychiatry without any plans for alternative service provision.) The 15% decrease in the number of psychiatric beds in general hospitals between 1994 and 2005 was similar to other specialties and was the consequence of central cost containment efforts. Psychiatric bed occupancy increased from 80% to 86% during the same period, with a 15% decrease in the average length of stay (NHIF 2006). Currently, community-based care options are either non-existent or in an embryonic state in Hungary.

The social care sector shows a somewhat different picture. Plans to shift the balance of care have already materialised and civil society organisations have begun to provide different forms of community-based care. Capacity is, however, inadequate and provision is geographically imbalanced. In addition, the joint financing of these facilities by the Ministry of Social Affairs and Labour and local governments usually does not cover the full running costs. The need for additional funding from grants/charities endangers the longer-term viability of these services. Despite the demographic changes noted, the capacity of longer-term social care facilities has remained unchanged since 1990, resulting in yearlong waiting times and increased pressure on chronic care hospital beds (Ministry of Social Affairs and Labour 2006).

Challenges in mental health policy

Currently Hungary does not have a national or regional mental health policies, and mental health issues including the promotion of good mental health and prevention of mental health problems (except substance abuse) have remained low on the government's agenda. During the MHEEN II project, the following major challenges to improving service provision for people with mental health problems could be identified:

- There are overarching financial difficulties in the health and social care sector.
- There is no pre-defined or ring-fenced mental health budget.
- Decision makers are concerned with cost containment in the short term and not with cost-

effectiveness in the long-term. Designing and implementing strategic reforms is difficult, mental health and general prevention/promotion activities are neglected.

- The rapidly changing political environment leads to almost continuous organisational reforms, insecure civil service positions, no continuum in responsibilities or health care programmes.
- Data collection on health service use is very limited and likely to be biased, therefore it is difficult objectively to assess and evaluate the impact of any planned reforms.
- Health and social care policies, budgets and service provision are segregated, causing the lack of inter-sectoral communication and collaboration.
- There are substantial geographical variations in terms of morbidity and the provision of services.
- Mental health training of primary care physicians is inadequate.
- Negative influence of extensive lobbying and individual interests.
- Advocacy groups have limited role.
- Stigmatisation.
- No comprehensive legislative context exists.

The future

At this present time, the future direction of mental health care in Hungary is not clear. Although there are several promising opportunities, implementation of the programmes, plans and legislations remain dependent on the support they receive at the strategic level (from ministries) and the careful re-allocation of resources by the relevant authorities. The growing support from health care professionals to shift the balance of care to the community is well reflected in a recently developed, multidisciplinary National Mental Health Programme. Furthermore, as of 2008, it has become mandatory to provide day activity centres and community care facilities for towns with more than 10,000 inhabitants. The Hungarian National Development Plan II for the period 2007 and 2013 may also provide great opportunities for more overarching reforms in mental health care. Finally, the sickness and disability benefit system is currently under revision with plans for more focus on rehabilitation.

Issues for Europe

This policy brief has highlighted many common concerns across Europe that policymakers and practitioners must face up to in reforming and developing services to promote mental wellbeing, prevent mental health problems and reintegrate people with mental health needs as full and participating citizens.

Economics can be used to support the policy making process, firstly by identifying the consequences of poor mental health, secondly by assessing the potential cost-effectiveness of interventions and initiatives to reduce these impacts, and thirdly by looking at how economic incentives and levers can be used to help facilitate change. In doing this we need to be mindful of a number of issues that are pertinent right across the EU:

- How can the human rights of people who use mental health services be protected, empowering them and ensuring that they are fully socially included?

- How can the old and discredited asylums that still dominate the landscape in many countries be closed? How can supportive community-based care best be developed?
- How can the perennially controversial issue of compulsory treatment be tackled, balancing the needs and rights of individuals and society?
- How can policy makers ensure that health, social care, housing, criminal justice, employment, and other systems work efficiently together to meet individual and societal needs?
- How can general levels of understanding of mental illness be improved in order to tackle the endemic stigma attached to mental health problems?
- How can treatments and support services to reduce the symptoms of mental illness be developed so as to improve the quality of life of people affected by them?
- How can mental health problems be prevented from arising in the first place through better identification of risk factors and better support of individuals and families?
- How can policy makers balance concerns for the promotion of mental well-being with the need to tackle poor mental health?

Encouragingly, discussion of these concerns and associated recent policy developments has increasingly recognised the importance of looking at the associated economic aspects and consequences. Economic analysis belongs within a broad policy context, and policy makers need to consider the wide-ranging and long-term implications of their decisions. Neglecting to make appropriate decisions can often cost more than taking the appropriate and timely action.

There is also much benefit to be derived from greater cooperation and collaboration across countries, particularly in building common approaches to data collection. Recognition of commonalities can help increase the generalisability of research, and can also contribute by pooling and augmenting access to health economics expertise, which remains very limited in some parts of Europe.

Mental health also has impacts on several non-health sectors and a continuing challenge for MHEEN and others will be to engage with these sectors and provide economic evidence that encompasses inputs from and impacts on the social care, housing, education employment, and criminal justice systems.

References

Andlin-Sobocki P, Jönsson B, Wittchen HU, Olesen J (2005) Cost of disorders of the brain in Europe, *European Journal of Neurology* 12 (suppl), 1–27.

Angermeyer MC, Matschinger H (1997) Social distance towards mentally ill: results of representative surveys in the federal republic of Germany, *Psychological Medicine* 27, 131–41.

Aos S, Lieb R, Mayfield J, Miller M, Pennucci A (2004) *Benefits and Costs of Early Prevention Programmes for Youth*, Washington State Institute for Public Policy, Olympia.

Appleby L, Morriss R, Gask L, et al. (2000) An educational intervention for front-line health professionals in the assessment and management of suicidal patients (The STORM Project), *Psychological Medicine* 30, 4, 805–12.

Bejean S, Sultan-Taieb H (2005) Modelling the economic burden of diseases imputable to stress at work, *European Journal of Health Economics* 50, 16–23.

Business in the Community (2005) *London Underground. Stress Reduction Programme*, BITC, London. Retrieved September 26, 2007 from http://www.bitc.org.uk/resources/case_studies/afe_hw_05_londonu.html

Dewa CS, McDaid D, Ettner SL (2007) An international perspective on worker mental health problems: Who bears the burden and how are costs addressed? *Canadian Journal of Psychiatry* 52, 6, 346–56.

Dretzke J, Frew E, Davenport C, et al. (2005) The effectiveness and cost-effectiveness of parent training/education programmes for the treatment of conduct disorder, including oppositional defiant disorder, in children, *Health Technology Assessment* 9, 50.

Jarvisalo J, Andersson B, Boedeker W, Houtman I (2005) *Mental Disorders as a Major Challenge in the Prevention of Work Disability: Experiences in Finland, Germany, the Netherlands and Sweden*, The Social Insurance Institution, Helsinki.

Kennelly B, Ennis J, O'Shea E (2005) Economic cost of suicide and deliberate self harm, In *Reach Out. National Strategy for Action on Suicide Prevention 2005–2014*, Department of Health and Children, Dublin.

Kilian R, Becker T (2007) Macro-economic indicators and labour force participation of people with schizophrenia, *Journal of Mental Health* 16, 211–22.

Knapp M, McDaid D, Amaddeo F, Constantopoulos A, Oliveira M, Salvador L, Zechmeister I, the MHEEN Group (2007) Financing Mental Health Care in Europe, *Journal of Mental Health* 16, 2, 167–180.

Leal J, Luengo-Fernandez R, Gray A, Petersen S, Rayner M (2006) Economic burden of cardiovascular diseases in the European Union, *European Heart Journal* 27, 13, 1610–19.

Mangalore R, Knapp M (2007) Cost of schizophrenia in England, *Journal of Mental Health Policy and Economics* 10, 23–41.

Mann JJ, Apter A, Bertolote J, et al (2005) Suicide prevention strategies. A systematic review, *Journal of the American Medical Association* 294, 2064–74.

Manning C, White PD (1995) Attitudes of employers to the mentally ill, *Psychiatric Bulletin* 19, 541–43.

Marwaha S, Johnson S (2004) Schizophrenia and employment – a review, *Social Psychiatry and Psychiatric Epidemiology* 39, 337–49.

Marwaha S, Johnson S, Bebbington P, Stafford M, Angermeyer MC, Brugha T, Azorin JM, Kilian R, Hansen K, Toumi M (2007) Rates and correlates of employment in people with schizophrenia in the UK, France and Germany, *British Journal of Psychiatry* 191, 30–37.

McDaid D, Oliveira M, Jurczak K, Knapp M, the MHEEN group (2007a) Moving beyond the mental health care system: an exploration of the interfaces between health and non-health sectors, *Journal of Mental Health* 16, 2, 181–94.

McDaid D, Halliday E, Mackenzie M, MacLean J, Maxwell M, McCollam A, Platt S, Woodhouse A (2007b) *Issues in the Economic Evaluation of Suicide Prevention Strategies: Practical and Methodological Challenges*, Personal Social Services Research Unit, London School of Economics and Political Science, London.

Ministry of Social Affairs and Labour 2006. <http://www.szmm.gov.hu>

National Health Insurance Fund (NHIF) 2006.
http://www.oep.hu/portal/page?_pageid=35,1&_dad=portal&_schema=PORTAL

Olshansky S, Grob S, Malamud IT (1958) Employers' attitudes and practices in the hiring of ex-mental patients, *Mental Hygiene* 42, 391–401.

Organisation for Economic Co-Operation and Development (2007) *OECD Health Data 2007*. OECD, Paris.

Organisation for Economic Co-Operation and Development (2004) *Benefits and Wages*. OECD Indicators OECD, Paris.

Országos Orvosszakertoi Intezet 2007.
http://www.oep.hu/portal/page?_pageid=77,2105920&_dad=portal&_schema=PORTAL

Poelmans S, Compennolle T, De Neve H, Buelens M, Rombouts J (1999) Belgium: A pharmaceutical company, In Kompier M, Cooper CL (eds) *Preventing Stress, Improving Productivity: European Case Studies in the Workplace*, Routledge, London, pp.121–148.

Polak P, Warner R (1996) The economic life of seriously mentally ill people in the community, *Psychiatric Services* 47, 270–74.

Rosenheck R, Leslie D, Keefe R, McEvoy J, Swartz M, Perkins D, Stroup S, Hsiao J, Lieberman J, CATIE Study Investigators Group (2006) Barriers to employment for people with schizophrenia, *American Journal of Psychiatry* 163, 411–17.

Rutz W, Carlsson P, von Knorring L and Walinder J (1992) Cost-benefit analysis of an educational program for general practitioners by the Swedish Committee for the Prevention and Treatment of Depression, *Acta Psychiatrica Scandinavica* 85, 457–64.

Schulze B, Angermeyer MC (2003) Subjective experiences of stigma. A focus group study of schizophrenic patients, their relatives and mental health professionals, *Social Science and Medicine* 56, 299–312.

Scott S, Knapp M, Henderson J, Maughan B (2001) Financial cost of social exclusion: follow-up study of antisocial children into adulthood, *British Medical Journal* 323, 191–94.

Sobocki P, Lekander I, Borgström F, Ström O, Runeson B (2007) The economic burden of depression in Sweden from 1997 to 2005, *European Psychiatry* 22, 3:146–52.

Sobocki P, Jonsson B, Angst J, Rehnberg C (2006) Cost of depression in Europe, *Journal of Mental Health Policy and Economics* 9, 2, 87–98.

Zechmeister I, Kilian R, McDaid D and the MHEEN Group (2008) Is it worth investing in mental health promotion and prevention of mental illness? A systematic review of the evidence from economic evaluations, *BMC Public Health* Jan 22; 8:20.

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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>.

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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 Jonnson (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).

Mental Health Economics European Network Phase II

Policy Briefings

- 1** Martin Knapp, David McDaid, Helena Medeiros, Thomas Becker, Sonia Johnson, Reinhold Kilian, Luis Salvador-Carulla, Judit Simon and Mehtap Tatar, on behalf of the MHEEN Group (2008) *Economics, Mental Health and Policy: An Overview, Report summarising findings presented at a MHEEN seminar (London, September 2007) and MHEEN symposium (Brussels, December 2007)*, MHEEN II Policy Briefing 1, Personal Social Services Research Unit, London. [ISBN: 978-0-85328-276-1]
 - 2** Martin Knapp, David McDaid, Silvia Evers, Luis Salvador-Carulla, Vidar Halsteinli, the MHEEN Group (2008) *Cost-effectiveness and Mental Health*, MHEEN II Policy Briefing 2, Personal Social Services Research Unit, London. [ISBN: 978-0-85328-233-4]
 - 3** David McDaid, Ingrid Zechmeister, Reinhold Kilian, Helena Medeiros, Martin Knapp, Brendan Kennelly, the MHEEN Group (2008) *Making the Economic Case for the Promotion of Mental Well-being and the Prevention of Mental Health Problems*, MHEEN II Policy Briefing 3, Personal Social Services Research Unit, London. [ISBN: 978-0-85328-235-8]
 - 4** Helena Medeiros, David McDaid, Martin Knapp, the MHEEN Group (2008) *Shifting Care from Hospital to the Community in Europe: Economic Challenges and Opportunities*, MHEEN II Policy Briefing 4, Personal Social Services Research Unit, London. [ISBN: 978-0-85328-234-1]
 - 5** David McDaid, Martin Knapp, Helena Medeiros and the MHEEN Group (2008) *Employment and Mental Health: Assessing the Economic Impact and the Case for Intervention*, MHEEN II Policy Briefing 5, Personal Social Services Research Unit, London [ISBN: 978-0-85328-237-2]
 - 6** David McDaid *et al* (2008) *Financing of Mental Health Care in Europe*, MHEEN II Policy Briefing 6, Personal Social Services Research Unit, London. [ISBN: 978-0-85328-238-9]
 - 7** Sonia Johnson, Luis Salvador-Carulla, Giuseppe Tibaldi, Torleif Ruud, Thomas Kallert, Tomaz Adamowski, Petr Nawka (2008) *Development and Application of a Short Tool for the Assessment of Mental Health Service Utilisation and Costs within a Small Catchment Area*, MHEEN II Policy Briefing 7, Personal Social Services Research Unit, London. [ISBN: 978-0-85328-239-6]
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