

**COSTING COMMUNITY CARE,
WITH PARTICULAR REFERENCE TO MENTAL HEALTH**

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Paper presented at the 1998 meeting of the Northern Ireland Health Economics Group

Effective community care into the 21st Century: The Key Issues

2 October 1998, Ballymena

INTRODUCTION

The title for the conference has caused me a little dissonance. In the mental health field, which is the focus for this presentation, Ministers announced earlier in the year that care in the community is to be 'scrapped'. As a result of what they perceive to be the 'failure' of the system of support, the previous Government's policy of community-based mental health care is no longer to be given the same emphasis or encouragement. Of course, comments from Ministers of this kind have sometimes been known to owe rather more to political rhetoric than to the realities of experiences on the ground. Nevertheless, they certainly help to focus our minds on the effectiveness of community care, particularly for people with enduring problems, and on whether scarce public resources are efficiently used.

I have chosen to focus on mental health in this presentation for a number of reasons. For a start it certainly accounts for a large proportion of NHS expenditure, and it is clearly a major political and public concern. It is also the subject of the first of the National Service Frameworks intended to pull together the best evidence and experience about how to deliver effective and cost-effective services.

POLICY CONTEXT

A good starting point for understanding the policy context is the 1990 National Health Service and Community Care Act. The Act had a number of well-known intentions and consequences. I want to draw particular attention to four features of the Act as they relate to mental health. The first was to move away from decision-making dominated by the availability of services to a system which sought to tailor service responses to the individual needs and preferences of users and their families. A second key component was the emphasis on a mixed economy of provision, rather than health and social care systems dominated by the public sector. Third, there was some rebalancing in England of the relative responsibilities of the NHS and local authority social services departments. Fourth, and as already noted, there was considerable emphasis on community-based care as an alternative to institutional provision, continuing what was in fact a long-term trend.

Following after the 1990 Act were a number of specific initiatives, such as the introduction of the Care Programme Approach in 1991, the introduction of the Mental Illness Specific Grant to channel money to social services departments, the promotion of supervision registers and

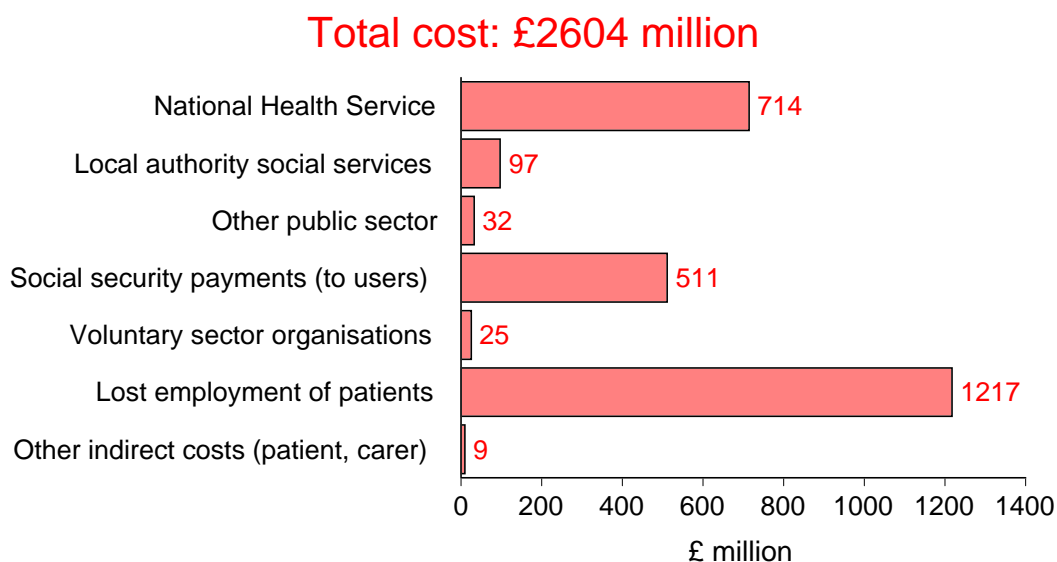
the introduction of supervised discharge arrangements. These were all built on the 1990 Act proposals, and have exerted greater or lesser influences on mental health care systems locally and nationally in recent years.

The Labour Government's policy emphases are not so very different from those of the Conservatives, despite the comments made by Ministers wishing to distance themselves from what has been achieved - or not - thus far. For example, there continues to be considerable reliance placed on community-based options for people with mental health problems, although the new Government has been quick to stress that these must be 'safe, sound and supportive'. It has also been more explicit in promising additional resources to allow the development of crisis services, nurse-staffed hostels, assertive outreach teams and a number of other service components. What is also rather different today is the greater emphasis placed on the promotion of quality and user outcomes, in contrast to what some people would see as the historical concentration in the NHS on expenditure containment.

SCHIZOPHRENIA CARE

We can identify some of the central issues around community care and its economics by focussing on perhaps the most difficult user group, people with schizophrenia. Schizophrenia is a relatively low incidence, but quite high prevalence illness. It is an enduring and often devastating disorder. It has high costs, both direct and indirect, and it has no known cure. Its impact on sufferers and their families can be enormous. The total costs of schizophrenia are shown in Figure 1, but even these are an under-estimate as they do not properly cover the costs of family support for people with schizophrenia.

Schizophrenia — the cost in England, 1992/93



Source: Knapp (1997)

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IMPROVING COST-EFFECTIVENESS?

Given the high costs of schizophrenia, particularly to the NHS (the illness accounted for 2.8% of all NHS expenditure in England in 1992/93) there is considerable pressure to contain expenditure whilst improving outcomes, or more generally to achieve cost-effectiveness improvements. Five particular policy/practice themes have relevance in this regard. Each has been covered by empirical research, each of them pointing to ways of improving cost-effectiveness whilst not necessarily requiring radical changes to the organisation of services or the training of personnel. These five are:

- medication compliance
- drug treatments
- family education
- community reprovion
- community diversion (assertive outreach)

Given the focus of today's conference, I will direct most of the remaining part of this presentation to the last two areas. However, it is useful to do a little bit more than mention the others because compliance improvements, drug treatments and family education are important components of good community-based mental health care.

Compliance therapy

Of particular concern in schizophrenia treatment is preventing relapse. In fact, relatively few people with schizophrenia experience only a single episode of the illness. A meta analysis of evidence by Weiden and Olfson (1995) concluded that one-third of the costs of schizophrenia relapse could be attributed to loss of medication efficacy and two-thirds to non-compliance with treatment regimes. Not surprisingly, therefore, care professionals have tried to improve compliance with their recommended treatment programmes and so also to improve the health and quality of life of schizophrenia sufferers.

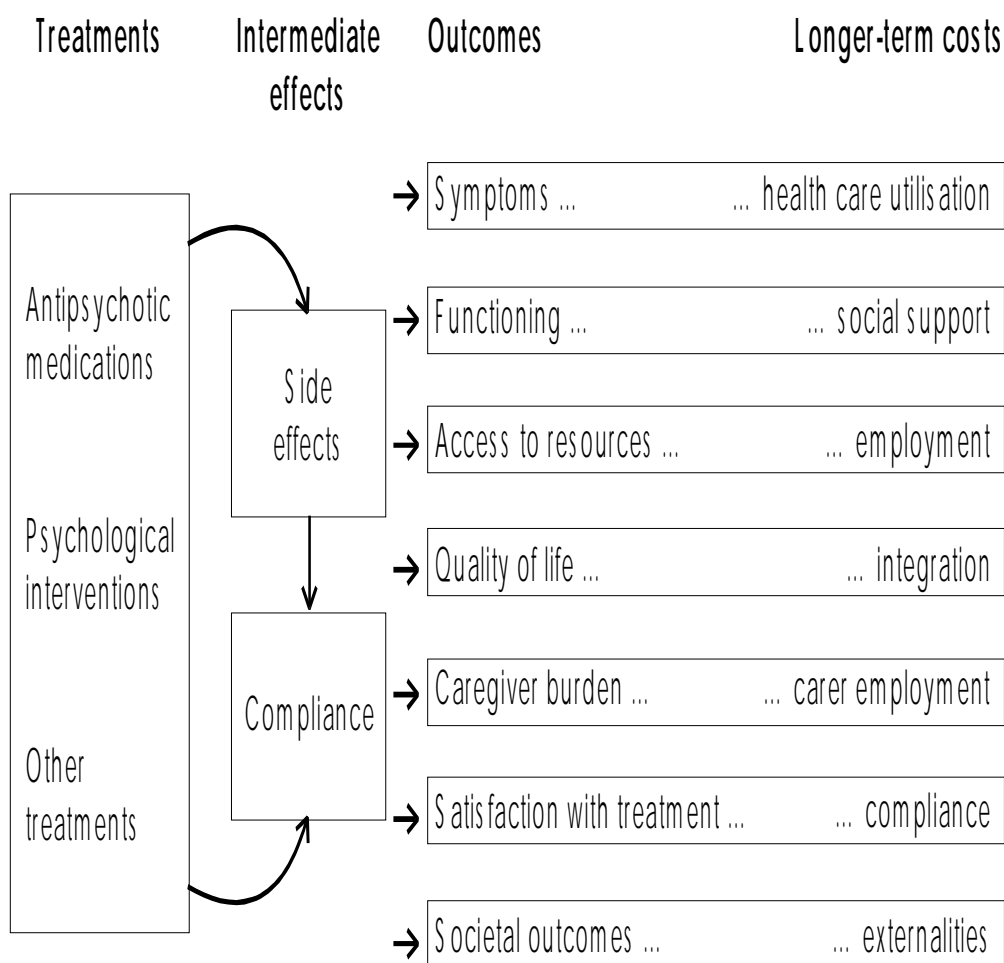
Psychiatrists and psychologists at the Maudsley Hospital have developed a short counselling intervention, *compliance therapy*, which targets this particular problem. Patients were invited to discuss first their attitude towards their illness, and subsequently the drawbacks and advantages of drug treatment. Patients counselled in this way were five times more likely (than a control group) to take their medication without prompting, and over an 18 month follow-up period had better global functioning, insight, compliance and attitudes to their medication (Kemp et al., 1998). The economic analysis found that costs were no more than with standard counselling (Healey et al., 1998). The 'compliance therapy' intervention was thus cost-effective.

Drug treatments

There is currently a drugs revolution in schizophrenia. The so-called atypical (novel) antipsychotics are being heralded as drugs which may be able to improve the impact on

symptoms over conventional medications, although this is sometimes disputed, and particularly to have fewer adverse side-effects. Conventional antipsychotics are disliked by patients because of their side-effect profiles.

The economic evidence has not yet been subjected to formal systematic review, and much of it is anyway relatively recent. What it suggests, however, is that the atypical antipsychotics have the ability to reduce the need for in-patient hospitalisation, and also reduce the demands on other service providers in the community (Knapp, 1997). The new drugs look like cost-effective alternatives to the conventional antipsychotics, and in conjunction with psychosocial therapies may eventually prove to be very effective.



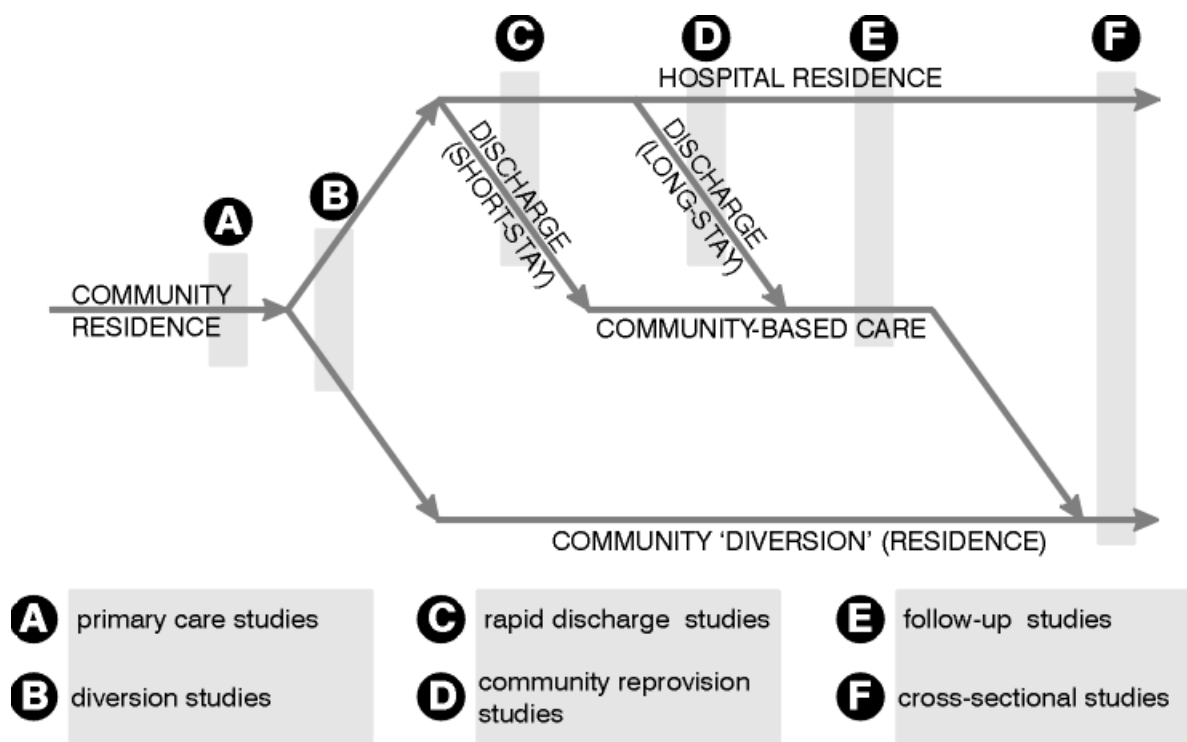
Family interventions

Family therapies aim to reduce the impact of family stress and conflict often seen in households with high levels of 'expressed emotion'. Family interventions can reduce relapse and re-admission rates, improve compliance and may also reduce costs (Mari and Streiner, 1996). Three studies with economic components were deemed to be of sufficiently good design to be included in the Cochrane systematic review, and although two of them measured

only health care service implications they suggest that family interventions can reduce costs while maintaining or improving outcomes.

Community care

Figure 3 gives a highly simplified representation of the mental health care system, showing stylised routes through community and hospital-based services. Imposed upon the diagram are six types of research study. It is immediately clear, therefore, that even a highly simplified model of a mental health care system and a short selection of research studies suggests a large research agenda. Not surprisingly, relatively little research evidence has yet accumulated to address the issues raised by this agenda. There are, however, two areas where evidence looks compelling: community reprovision for former long-stay hospital residents, and community diversion (such as assertive outreach) for people with acute illnesses living in the community.



Community reprovision

The most comprehensive and longest running evaluation of community-based care for former long-stay hospital in-patients has looked at the closure of Friern and Claybury hospitals in North London (Leff, 1997). The former residents of these two hospitals have been studied for five years since their discharge from hospital, with a lot of evidence collected on their quality of life, health status, accommodation, service use patterns and costs.

The outcome findings suggest that former in-patients were enjoying a quality of life at least as good as in hospital. (These results come from as yet unpublished five-year, follow-up work by Julian Leff and colleagues.) There were no problems with higher-than-normal

mortality, or with homelessness and crime. Accommodation stability in the community was impressive, and care environments were much better than in hospital. Social networks were stable - a minority gained in this respect, but most were not socially integrated into local communities. Hospital readmissions were quite common (38% of the sample had at least one readmission over a five-year period). Careful examination of clinical outcomes revealed striking stability over time in both psychiatric symptoms and social behaviour. Users clearly preferred community living to hospital.

Our associated economic evaluation found that many services were used in the community. Patterns of service use changed over the five-year follow-up period. The costs of these services when aggregated were no different from the costs of the long-stay hospital care which people left. Indeed, bearing in mind the ageing of the leavers it could be argued that community care is *less* costly than hospital. Consequently, the weight of the cost and outcome findings suggested that community care was more cost-effective. Higher cost community care packages appear to be associated with better individual outcomes. Care appears to be more cost-effective in the public than in the private sectors (Knapp et al., 1998a).

Community diversion (assertive outreach)

As I noted earlier, a great deal of attention is now focussed on the organisation of community-based care for acutely ill people. In particular, the assertive community treatment (ACT) or outreach model developed in Madison, Wisconsin, has attracted much interest in the UK. There are, of course, many different arrangements now in place to coordinate community care for people with mental health problems, but Ministers here intend to include some variant of ACT in their imminent policy announcement.

The Daily Living Programme (DLP) was a UK adaptation of the Madison model. It offered intensive home-based care for seriously mentally ill people facing crisis admission to the Maudsley Hospital. The DLP was set up and evaluated by Isaac Marks and colleagues, and my colleagues and I were invited to conduct the associated cost-effectiveness analysis (actually a 'cost-consequences analysis' in current terminology).

A randomised controlled study examined the cost-effectiveness of the DLP compared to standard in/out-patient hospital care over 20 months, followed by a randomised controlled withdrawal of half the DLP patients into standard care. Three patient groups were therefore compared over 45 months, depending on the support they received: DLP throughout the period, DLP for 20 months followed by standard care, and standard care throughout. The economic evaluation found the DLP to be more cost-effective than standard care over months 1-20, and also over the full 45 month period, but the difference between groups may have disappeared by the end of month 45 (Knapp et al., 1998b). The reduction of the cost-effectiveness advantage for home-based care was perhaps partly due to the attenuation of DLP care (particularly the loss of responsibility by the DLP team for in-patient admissions and discharges).

CONCLUSION

We have seen that mental health is a costly problem, not just for the NHS and other public sector bodies, but for sufferers, their families and the wider society. With the policy emphasis on community-based mental health care, purchasers, providers and politicians are urgently searching for more cost-effective modes of support and treatment.

Five areas have been discussed to show how cost-effectiveness improvements might be attained. Three of these areas relate to the individual treatment of schizophrenia patients, through pharmacological or psychological methods. Accumulated evidence shows that these treatments can be not only effective in terms of their impacts on symptoms and patient quality of life, but also cost-effective in making good use of scarce public sector and other resources.

There is also encouraging evidence in relation to community care for people with either chronic mental health problems or experiencing acute phases of their illness. Closing long-stay psychiatric hospital beds has been a controversial policy, but one that appears to be paying dividends. Assertive outreach, for example in the form of the Daily Living Programme tried at the Maudsley hospital, appears from international evidence also to be an effective and cost-effective mode of community organisation.

REFERENCES

Healey A, Knapp, MRJ, Astin J et al. (1998) Cost-effectiveness evaluation of compliance therapy for people with psychoses *British Journal of Psychiatry*, 172, 5, 420-424.

Kemp R, Kirov G, Everitt B, et al. (1998) A randomised controlled trial of compliance therapy: 18 month follow-up *British Journal of Psychiatry*, 172, 413-419.

Knapp MRJ (1997) Costs of schizophrenia, *British Journal of Psychiatry*, 171, 6, 509-518.

Knapp MRJ, Hallam A, Beecham JK, Baines B (1998a) Private, voluntary or public? Comparative cost-effectiveness in community mental health care, *Policy and Politics*, forthcoming.

Knapp MRJ, Marks I, Wolstenholme J, Beecham JK, Astin J, Audini B, Connelly J (1998b) Home-based versus hospital-based care for serious mental illness. Controlled cost-effectiveness study over four years, *British Journal of Psychiatry*, 172, 6, 506-512.

Leff J, editor (1997) *Care in the Community: Illusion or Reality?*, John Wiley & Sons, Chichester.

Mari JJ, Streiner D (1996) The effects of family intervention on those with schizophrenia, in C Adams, J Anderson and J De Jesus Mari (eds) *Cochrane Database of Systematic Reviews: Schizophrenia Module* BMJ Publishing, London.

Weiden PJ, Olfson M (1995) Cost of relapse in schizophrenia, *Schizophrenia Bulletin*, 21, 419-429.