Different illnesses vary in their responsiveness to donor lymphocyte infusion—chronic myeloid leukaemia is the most responsive, myeloma and low grade lymphoma less so, and the acute leukaemias much less so.[8] This reflects mainly the time needed for effective antimalignant immune responses to develop. Tumour regression after allotransplantation and treatment with donor lymphocytes has also been reported in patients with solid tumours—for example, renal, breast, and bowel carcinomas[9]—and we are just beginning to understand the targets that may be recognised by the donor cells.

An extension of the idea of exploiting donor immune responses is to carry out transplants where the chemotherapy is aimed at creating space for the donor immune system to develop rather than directly treating the malignancy.[10] By giving chemotherapy that is strongly immunosuppressive but not myeloablative, a state of recipient-donor mixture, or chimerism, can be achieved. Because the chemotherapy is of low intensity the acute side effects are few. The risk of graft versus host disease, however, remains and makes intensive follow up with monitoring for opportunistic infection necessary. Although the chimeric state may be effective against single gene disorders such as sickle cell disease or thalassaemia, for malignancies the lower dose of chemotherapy used means that it may not be able to control the tumour. A second phase of treatment with donor lymphocytes is often needed. This approach has allowed the application of allotransplantation to patients who would otherwise have been excluded from treatment because of age or coexisting medical conditions. Prospective trials are needed to determine its usefulness.

A new area of transplant biology now exists, exploiting immune effects of donor lymphocytes to eradicate malignancy; transfusion of specific antivirus lymphocytes against infections such as cytomegalovirus; expansion in vitro of lymphocytes that recognise tumour cells, and specific depletion of lymphocytes that recognise normal recipient tissues.

As the use of straightforward chemotherapy at intensive doses with autologous rescue becomes more circumscribed, so the application of allotransplantation has expanded. The hope for the future is that by better understanding—particularly of alloimmunity—we will be able to move towards use of transplant procedures that are safer but effective in quite different ways.

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We thank Keiren Towlson and Professor Nigel Russell for providing registry data.

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The NHS, the private sector, and the virtual asylum

Proper systems are needed to develop, manage, and monitor cooperation between public and private sectors

The British government is promoting close cooperation between the NHS and the private sector.[1] In mental health care, an outcry over conditions in private "madhouses" led to legislation and the establishment of county asylums in the early 19th century, almost eliminating private care.[2] The number of beds for people with mental illness in the NHS dropped from a peak of 148 000 in 1954 to 35 740 in 2000.[3 4] As this decline accelerated, a thriving private market in the provision of beds for long stay patients emerged.[5] It is time to consider the consequences.

One of the successes of community care has been the ability of non-statutory organisations to provide a diversity of supported housing. The private provision of long term inpatient care is more problematic. The lack of NHS facilities for patients whose behaviours are intractably difficult to manage or who have unusual psychiatric needs has been exploited as a market opportunity by large and small businesses. For example, over a third of beds in England for patients in need of security are within privately owned institutions.[6] In October 2000, 491 patients in England were detained under the Mental Health Act in 10 private secure facilities and 1406 patients were detained in nursing homes in the private and voluntary sectors.[6 7] Private facilities have developed at a distance from purchasers and without a policy framework for the

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protection of patients' long term interests. Patients dislike isolation from family and friends and are vulnerable to changes in the institution's niche in the market. But these detained users of private services have little influence over their circumstances. The network is a "virtual asylum," dispersed, invisible, and inadequately regulated.

Patients often arrive in the virtual asylum after lengthy, unproductive stays in acute psychiatric wards. Others come from prisons, special hospitals, and NHS secure units. Many have been moved from institution to institution since childhood. Some have a bad reputation with local NHS services, which have lost the will to deal with them. In the absence of appropriate NHS provision, these patients are placed in the private sector. In smaller nursing homes, where low profit margins do not allow the employment of full multidisciplinary teams, patients are subjected to little purposeful activity. Often, few fully trained nursing or medical staff are available. Care tends to be basic. Larger and more expensive facilities are able to attract better qualified staff. Patients entering this part of the virtual asylum are likely to receive rehabilitation, albeit often focused on acculturation to institutional life. Even where care in these institutions exceeds NHS standards, this is offset by severe difficulties in integrating patients back into reluctant local community services.

The cost of placement in secure services is £2000-2250 per week ($3100-3500; €3100-3500).[6] The cost of non-secure services shows much greater variation. The annual national cost probably greatly exceeds £100m, but no mechanism is in place to monitor the value for money of this substantial expenditure.

Variability of care is endemic in the NHS, but it is at least possible to measure it. Until now it has been possible for patients to live in the virtual asylum, with little or no monitoring of quality of care. Nursing home inspection teams and the Mental Health Act Commission can monitor legal requirements but cannot adequately oversee the quality of individual care. It is hard to see how the new National Care Standards Commission will be able to function any better at the level of the individual.[8] The incoherence of the current approach may worsen as commissioning transfers to primary care trusts each with a tiny number of such patients. Few primary care trusts have developed the commissioning capability for this specialist task.

Episodes of moral panic continue to dominate formation of mental health policy in the United Kingdom. Concern about neglect and abuse in mental hospitals in the 1970s gave way to concern over the perceived danger of mentally ill people in the community in the 1990s. This has generated some ill considered policies. The virtual asylum is ripe for a destructive moral panic, which would be likely to focus blame on service users, clinicians, and purchasers. If the private sector were discredited, the cost of reproviding services in the NHS would be prohibitive. The main victims of this scenario would be patients and their families, rather than the policy makers and politicians who inadvertently created the virtual asylum.

A partnership between the public and private sectors cannot develop on an ad hoc basis. A clear and agreed agenda for the private sector's role is essential, together with proper systems to develop, manage, and monitor the interface between both sectors. Such systems take time to develop, and this requires respite from the epidemic of NHS reorganisation and policy initiatives, together with some genuine joined up thinking.

If these basic requirements cannot be achieved for mental health, with its long history of cooperation with non-statutory services, then an overarching NHS policy of public-private partnership has little credibility for other healthcare sectors.

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The views presented in this paper are those of the authors and do not necessarily reflect the views of their employing organisations.

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Physical activity for preventing strokes

Better designed studies suggest that it is effective

Stroke remains the most common life threatening neurological disorder, accounting for about 10% of all deaths worldwide.[1] This is despite a decline in mortality rates due to stroke in most industrialised countries since the early 1900s owing to a decrease in case fatality or incidence, or both. Stroke is a leading cause of disability, and its treatment entails prolonged hospitalisation, with a commensurate financial toll. Preventing strokes is therefore of public health and economic importance.

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